APIARY.

Preparation of the Colony for Work.

When the weather has become sufficiently settled to render safe the inspection of the brood-combs, or, in general, when the bees fly the greater part of each clear day, the work of the queen may be inspected. Should the comb having the largest area of brood in it be towards one side of the hive, it is best to locate it as near the center as may be, placing successively those combs having smaller circles of brood, and on each side of these the combs having no brood but well stored with pollen, while those having honey only will come still outside of these. The brood-nest will then have an opportunity to develop in all directions. Empty combs are of little use at this time outside of the brood-nest as thus arranged, and should be replaced by combs of honey, if the latter is needed, or removed altogether. Warm covering above and outer protection are necessary, if the best results are to be attained. With favorable weather for the development of brood, it is certain that stimulative feeding, if made necessary by the fact that the natural honey resources of the country will not alone bring the strength of the colony fairly up to the desired standard by the opening of the harvest, is to be begun six or seven weeks before the opening of the honey flow from which surplus is to be expected.

If, however, this honey flow comes so early that it is likely to be preceded by weather unfavorable to the development of brood, as occurred last year, it will be necessary to allow for this by beginning the stimulation even earlier, so that it may be done more gradually, and the greatest care will have to be taken to retain all the heat of the brood-nest. Should the main flow be preceded by a lighter one, especially if the latter one comes some weeks before the chief harvest, it may be important to watch the brood-nest closely lest it become clogged with honey, to the exclusion of brood, inclining the bees not to enter surplus receptacles placed above, and causing the colony to be weak in numbers later in the season. This state of affairs can be easily avoided, says Frank Benton, M. S., in his Manual on Apriculture, by the timely use of the honey extractor, since the brood-combs emptied of the honey which the workers in an emergency have stored wherever they found vacant cells are made available for the queen. Before the main harvest opens, it may even be necessary, in order to keep the combs filled with brood, to feed back gradually this extracted honey or its equivalent; but by taking it away and returning it gradually, the object sought will have been accomplished, namely, keeping the combs stocked with brood until the harvest is well under way, or as long as the larger population thus gained in the hive can be made available.

QUESTIONS AND ANSWERS.

[In order to make this department as useful as possible, parties enclosing stamped envelopes will receive answers by mail, in cases where early replies appear to us advisable; all enquiries, when of general interest, will be published in next succeeding issue, if received at this office in sufficient time. Enquirers must in all cases attach their name and address in full, though not necessarily for publication.]

Veterinary.

CATARRH IN SHEEP.

"BREEDER," Ontario Co.:—"There is a disease among our sheep which I do not understand. Their eyes run water, and in a few days the pupils become pinkish in color. There does not appear to be any scum on the eye. Some of them are almost blind. What is the disease, cause, and remedy?"

[The symptoms more nearly resemble catarrh than any other sheep disease, although it is impossible to say definitely from the few symptoms given that it is catarrh. In view of the seriousness and uncertainty of the nature of the trouble, we would recommend that a competent veterinary surgeon examine the flock. The following is the cause, symptoms, and treatment of catarrh: Catarrh or cold is a very common disease among sheep during the winter months, especially if they are badly nourished when housed and then brought into condition by means of food too abundant or administered without judgment. Their confinement in sheep cotes (hot and ill-ventilated; the emanations from the dung and urine allowed to accumulate) causes them to be readily attacked by disease of the air passages on very slight exposure to inclement weather. The prominent symptoms are an accelerated pulse (which may be taken between the thighs); laborious breathing; the muzzle of the sheep rests on the side: the animal sneezes and makes frequent attempts to get rid of a yellow mucous discharge with which the nostrils are clogged. The eyes become of a pinkish hue, and water freely at the corners in consequence of being a continuation of membrane that lines the throat and nose. This membrane, known as the conjunctiva, is peculiarly liable to degenerative changes in cases of malnutrition, leading to opacity of the cornea. As the animal recovers its normal health it rapidly assumes its natural character without treatment. There is one symptom that is remarkable in sheep—any affection of the air passages causes great tenderness of the loins; when pressed upon the animal suddenly falls to the ground. The unfavorable signs are the pulse increasing in frequency, losing of strength, the membrane of the nose becomes of a leaden hue, the ears lop, and legs become deathly cold, the eyes bloodless, sunken, and death quickly closes the scene. *Treatment.*—First of all it is of great importance to place the animal in a warm, comfortable atmosphere, where you have security from draughts, but plenty of air. The general assumption is that the fleece ought to be sufficient protection to the patient; but no matter what medicine and remedies you employ, if you do not obey the ordinary rules of protection and comfort for sick animals all your efforts will be in vain. Pure water, good ventilation, and keeping the animals warm, in a pure, dry atmosphere, ought to be the motto of every sheep breeder. If the animals are inclined to eat, you must feed sparingly on easily-digested food—chopped oats, boiled flax-seed gruel, warm milk, with a rack of hay. The application of some good stimulating liniment to the sides and chest, and the following medicine: Nitrate of potash, 1 dram; powdered digitalis, ½ dram; tartar emetic, ½ dram, which is a dose for a sheep, to be given in half a pint of linseed tea every day, or a handful of moistened meal if feeding.

WM. MOLE, M. R. C. V. S.]

PARALYSIS IN COW.

W. E. STREATFIELD, Muskoka:—"I have a cow six years old, due to calve on the 25th of Feb. last; on that day she was unable to get up without assistance. She calved on the 29th a fine, healthy bull calf. The afterbirth came away all right, and milk appeared to be all right. However, she could not get up, nor could we get her up until to-day (March 10), when she made an effort, and, with assistance, got up. The cow eats and drinks well, and I find that there is a hole about two inches in diameter just at one side of the vulva, which looks raw—as if a gathering had broken; there was considerable mattery discharge. I should like your veterinary's advice in this case?"

[We must certainly thank our correspondent for the very accurate account of the symptoms and condition of this cow, and there is no difficulty in giving a diagnosis of this disease. There are several kinds of paralysis: Partial paralysis (when only one muscle or set of muscles are affected), hemiplegia (when one side of the body is affected), paraplegia (when the hind quarters only lose their power). The latter is the most common in our domesticated animals, so that we shall confine our remarks on treatment to this form, paraplegia. Paralysis is loss of motive power and sensibility of the body and limbs. It may proceed from injury or disease, either of the brain or spinal cord. This disease is not uncommon in cattle, and requires, at times, a good deal of practical skill in diagnosing, the cause being more often a symptom (as in this case) than a disease. A fruitful cause of paralysis in cattle is blows with the milking-stool or other handy weapons, strains, beasts romping each other, exposure to wet or cold conditions. It is very often seen in cows which are low in condition, or poorly fed and heavy in calf; the enlarged condition of the womb (the weight of the calf) will cause pressure of the blood vessels and nerves supplying the hind extremities, this causing the paralysis and loss of power prior to or immediately after calving. As a rule, the animal recovers after calving and requires only such care as will minister to her general comfort. Good bedding; a large loose box; turning over once or twice a day; soft, sloppy diet; and a good purgative: Epsom salts, 16 ounces; powdered ginger, one ounce; also some tonic powders to act on the nerve center: powdered nux vomica, 2 ounces; bicarb. of soda, 12 ounces; mix, and divide into 24 powders; give one night and morning in a quart of flax-seed gruel. Strychnine is a very powerful medicine for this complaint, but we are always afraid to give it, unless under our own immediate supervision. The abscess and discharge that you mention, at one side of the vulva, has been probably the cause of all the mischief. Well foment twice a day and dress with a solution of carbolic acid: Pure carbolic acid, two drams; glycerine, one ounce; water, ten ounces; inject into the wound one ounce night and morning with a glass syringe. Report progress in two weeks. DR. WM. MOLE.]

LUMPY-THROATED CALVES.—RETENTION OF AFTER-BIRTH.—DEHORNING.

PERCY, P. Q.:—"(1) I have had nine cows calve within the last ten days. Eight of the calves have lumps about the size of a tennis ball on the throat. What is the cause, and is there any remedy? Is it anything serious in a pure-bred calf? (2) Please tell me what to do where a valuable cow does not cleanse within four days? Now she has no appetite, does not chew the cud, and the udder is much inflamed. Is there any danger of blood poison? What is the best thing to give cows directly after calving to help them to cleanse? (3) Please report on dehorning cattle?"

[With respect to the calves, without inspection it is most difficult to say what is the cause of the swelling on all their throats. The most important fact is not disclosed. Are they all by the same bull, and is he suffering from goiter or bronchocele (enlargement of the throat gland)? It is likely due to some congenital imperfection or local cause. If a local cause, will be infectious, such as aphthæ or thrush of the mouth. This is one of the troubles of the suckling calf. It shows itself as a white curdy elevation on the tongue and throat, but without some better history we are unable to advise treatment. (2) We have frequently answered this question of late in various ways, all tending towards the same result. From certain causes, such as abortion, premature calving, difficult calving, fast or retained cleansings, the generative organs become much deranged, and require careful and special treatment. Let me here say all such cases should be isolated at once. In cases where the cleansings (that is, the fœtal membranes) are fast, we advise that they be taken away at once. Their retention is owing to one or two causes: debility is often a cause, from the animal's system not possessing vital power enough to cause such contraction of the uterus as shall throw off the membranes; and also too energetic contraction of the uterus may be a cause, from it becoming entangled by the cotyledons, by contact and adhesion between the uterus and mouth of the womb. Should the placenta have remained for any time after calving, no period should be lost in removing it, which should be effected by introducing the hand into the uterus and carefully separating it from its connection with that organ, bearing in mind that any rough handling is likely to cause considerable hemorrhage or bleeding. Ergot of rye is often useful in causing the uterus to throw off the placenta, but it should only be used under the direction of a veterinary surgeon. There is always great danger from these cases; the vital powers appear to sink very rapidly, and blood poisoning soon sets in from absorption. The loss of appetite and inability to chew the cud are symptoms of septic poisoning, and we much fear that before you see this report your cow will be numbered with the past. The best medicine that we find is a good laxative immediately after calving: Epsom salts, 12 ounces; powdered ginger, 1 ounce; nitrate of potash, 1 ounce. In some cases a little ergot of rye is added, or juniper berries; this is useful in obstinate cases, but special cases require special treatment. (3) Dehorning is steadily growing in favor, and is becoming very general both with dairymen and feeders of beef cattle. For mature cattle, clippers and saw are both successfully used, the former being most rapid; and for calves, Haaff's dehorning tools (which we offer as a premium), and also caustic potash. Write Hon. John Dryden, Minister of Agriculture, Toronto, for report of Dehorning Commission. DR. WM. MOLE.]

RINGBONE.

GEORGE MEEK, Ontario Co.:—"Could you tell me what to do to cure ringbone on my horse's foot? It is swollen hard above the hoof in the near hind leg.

[A ringbone, when in front of the coronet, assumes the form of a convex swelling; may be the result from severe labor in early life before the process of ossification has been fully completed, or the cause may be a severe contusion resulting from caulking during the winter. More often they possess the character of a legacy from sire or dam. We claim that a disposition to contract this particular form of disease is the direct result of breeding from unsound parents possessing this defect. The importance of considering this point is too little understood in the selection of breeding stock. We might say a great deal on this point and not exhaust the subject. The size of the ringbone does not indicate the degree of lameness. While a large ringbone will cause very little interference, a smaller growth, if situated under the tendon, may become the cause of considerable pain and consequent lameness. If there is not any lameness, non-interference is much the best course to pursue; if lame, the application of a blister composed of biniodide of mercury, 1 part; lard, 8 parts, should be rubbed on; if these fail, firing with the hot iron may be a last resort. In the earlier stages of the disease, if any inflammation is present, hot fomentation and a liniment of iodine well rubbed in every day will often remove the urgent symptoms, but a disease of this nature ultimately gives rise to incurable lameness.

DR. WM. MOLE.]

Miscellaneous.

THE COLOR OF BRONZE TURKEYS.

A SUBSCRIBER, Elva, Man.:—"Please tell us how pure-bred Bronze turkeys should be marked? Have they any white on them?"

[Pure white feathers in any part of the plumage will disqualify, but I have seen young birds from apparently pure-bred Bronze come white. I remember a few years ago Mr. Dayton, then of Kildonan, now of Virden, had a magnificent Bronze gobbler imported from one of the leading breeders in the States; he also had as fine a lot of hens as I ever saw; and several of the chicks were pure white, but I never saw a bronze and white hatched from pure stock. Some of the feathers in the wings and tail are occasionally fringed with white, especially in old hens. This fringe should be gray.

M. MAW.]

NUT TREES IN NORTH DAKOTA.

FARMER, N. D.:—"Would nut trees thrive in North Dakota? What kinds would do best? What precautions would have to be taken against the intense cold of this country?"

[The only nut tree or bush known to thrive at present in North Dakota is the improved hazel nut. I understand that a few walnut trees are growing and bearing seed in Southern Minnesota; the growth of these trees could in all probability be extended still further north by using seed from these Minnesota trees.

S. A. BEDFORD,
Exp. Farm, Brandon, Man.]