

APIARY.

Swarming.

No doubt the advanced condition of this season will induce early swarming, as it is generally due to an abundant secretion of honey and the general prosperity of the colony. The outward indications immediately preceding swarming are a partial cessation of field work on the part of colonies that have been industriously gathering and the clustering or loitering of the workers about the entrance at times when they have usually been engaged in collecting and when other colonies, no more populous, are at work. Suddenly great excitement seizes the workers that happen to be in the hive at the time, when they rush out pellmell, accompanied by the old queen, and after circling about for some minutes cluster on some neighboring tree or shrub.

When a swarm has fairly settled it is best to hive it as soon as possible, lest others coming out may join it, occasioning a loss of queens and sometimes of bees. The operation of hiving may appear very formidable to the novice and attended with great risks, but a little experience will dispel such apprehensions. The bees before swarming usually fill their sacs with honey, and are quiet and peaceful, so that by the use of a little smoke in hiving there is seldom any difficulty. A glance at the operation as being performed by the lady in the illustration shows how easily it can be done. The same sort of quiet, deliberate motion as should characterize all handling of bees is as effective here as at any other time. To be doubly sure the novice should sprinkle sweetened water over the cluster, and at the same time wear a veil to protect the face, is advised by Frank Benton, in his manual issued by the American Department of Agriculture. If the cluster should be on a small limb, which can be readily cut off, it can be laid down in front of the new hive, which should have a full width entrance, to be raised up in front. The bees will go trooping in, but if not fast enough, gentle urging of the rear guards with a feather will hasten matters. If the bees have clustered on a branch which it is desirable to preserve, yet where the hive can conveniently be placed directly under the cluster and close to it, the swarm may be shaken into the hive at once, as shown in the illustration, or the hive may be located on the stand it is to occupy, and the bees shaken into a large basket, or into a regular swarm-catcher, and poured in front of the hive. A convenient home-made swarm-catcher is arranged by attaching a long cotton bag to the end of a long pole, held open at the mouth by means of a wire hoop attached to the pole. This can be slid up around the cluster, when the limb should be subjected to sharp tapping, which will cause them to drop into the catcher. If the bag is then given a twist over the pole, they are safe to convey to any point. When the hive is reached the bag should be carefully inverted before the hive, when they will march into their new home. If thought wise they can be given a little smoke and then dipped, by means of a dipper, upon a board before the entrance. As soon as the swarm is fairly within the hive it should be carried to its permanent stand and well shaded and ventilated. The new swarm having the old queen will be in fine condition for work. It should, therefore, be given a super in a few days, which they will readily fill.

To prevent swarming the racks should be examined occasionally, and the green cells pinched, so that they will be destroyed, also give more room above by the addition of supers.

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.

ACTINOMYCOSIS.

W. F. E.:—"Please tell me what should be done with a cow having actinomycosis or wolf jaw? Is it lawful to use the milk? The lump is pretty well developed. We have been using a salve composed chiefly of iodine, I think."

[A description and treatment of actinomycosis has been given in the ADVOCATE several times during the last few months; the last time in May 1st issue, page 191. A good purge should be given at first, from one to two pounds of Epsom salts with a little ginger added, and then administer daily two-dram doses of iodide of potassium in a mash, gradually increasing the quantity for two or three weeks. If the animal goes off its appetite cease giving the iodide for a few days and then commence again. In about six weeks an improvement will be noticed. According to the law governing the sale of milk in cities, towns, etc., milk from cows with any disease, including actinomycosis, is forbidden to be used.]

BLOODY MILK.

HERMAN WRIGHT, Simcoe Co., Ont.:—"I would like to know through your valued paper if it is possible to dry up cows in the flush of milking, say six weeks after calving, without injury or interfering with fattening them. They are not desirable cows to milk; one of them is liable to give bloody milk any time. Would also like to know the cause of cows giving bloody milk?"

[Persistent milkers are usually difficult to dry, but it can be done without injury to their welfare as "beefers." The course to pursue is to give a heavy dose of purgative medicine: Epsom salts, from 1 to 1½ pounds; treacle, from ½ to 1 pint; ground ginger, ½ an ounce; dissolve in 1 quart of hot water and give in one dose. She should be fed sparingly on dry food without grain, with a scanty supply of water. After the purge has acted, give daily until the milk ceases to secrete: Powdered alum, 2 drams; vinegar, ½ an ounce; water, ½ a pint. Gradually discontinue milking, and never strip dry. The giving of bloody milk is due to some derangement of the udder, usually caused by injury, such as a bruise or the like which causes ruptures of the bloodvessels in the udder. It is sometimes caused by "dogging" when the udders are distended with milk.]



HIVING A SWARM.

LAMPAS—DAIRY POINTS—HENS.

"FRESHIE," Prescott, Ont.:—"1. A four-year-old mare I have just bought has the lampas, which bothers her considerably in feeding. She has been eating dry hay, but I feed moistened cut hay and provender. (a) Is the lampas a disease or only the symptom of some disease? (b) What is its cause? (c) Are surgical operations, such as cutting or burning, necessary or advisable? (d) If not, is the inflammation likely to last long? 2. In judging a milch cow, of whose reputation you know nothing, (a) What marks would you look for? (b) Are such marks independent of her breed marks? (c) If so, and found in a cow which was only low bred, would you expect her offspring to inherit her good qualities? 3. Please tell me also what breed of hens you consider the best layers, taking size and number of eggs into account?"

[1. Lampas is congestion, fever, and swelling of the gums and bars of the mouth. It is peculiar to young horses, due to teething, and may be considered a provision of nature to protect the incoming teeth. It rarely occurs in aged horses, when it is due to digestive derangement. A remedy is often found in feeding unshelled corn, but to scarify with a lance or sharp knife half an inch back from the teeth, followed by soft or green food, and an astringent wash such as alum water or weakened vinegar is a surer means of curing. Burning is not only useless but barbarous. The inflammation will likely subside in a few weeks

without any treatment. 2. (a) The points of a good dairy cow are: Head smallish and lean, and broad between full, placid eyes; neck rather long, thin, and clean at throat; shoulders fine and sloping; loins broad; barrel long, well sprung and deep at flank; hips well apart and rump high. The skin should be flexible, velvety, and coated with fine, soft hair. When the hair is of light color the skin about the flanks, inside of ears, and end of tail should be waxy and yellow. The udder, being the most important part, should extend well forward, well up behind, and have teats well apart. When milked out it should neither be like an empty rag nor very fleshy, but a nice medium. The milk veins should be prominent, tortuous, and enter the body by large orifices well forward. (b) Yes. (c) If bred to a pure-bred bull she would likely produce calves much like their sire. 3. Mr. A. G. Gilbert, Poultry Manager at the Dominion Experimental Farm, Ottawa, found that during the months of January to June, inclusive, pens of 11 of different breeds ranged as follows: Barred P. Rocks, 607 eggs; Langshans, 553; W. Leghorns, 518; S. L. Wyandottes, 479; Andalusians, 462; White P. Rocks, 430. The same authority claims that Black Minorcas, Langshans, and Light Brahmas are layers of the largest eggs. Capt. A. Young, Tupperville, Ont., found last summer in a test that Silver Spangled Hamburgs laid the largest percentage of eggs among his eight breeds, which stood in the following order of merit: S. S. Hamburgs, White Leghorns, Light Brahmas, S. G. Dorkings, B. Spanish, Partidge Cochins, B. Leghorns, and S. Wyandottes. We might say that Plymouth Rocks and Wyandottes are usually classed among what are styled the "general purpose" breeds; the Leghorns, for example, being considered specially as egg producers. As in the case of milch cows, so with laying hens: we presume there is as much or more difference between individuals as between breeds. One test does not settle which is the best breed of hens; much also depends upon the care and feeding.]

Miscellaneous.

ROUND-HEADED APPLE-TREE BORER.

W. G. BARKER, Ont. Co., Ont.:—"Would you kindly give me some information as to what is wrong with some of my young apple trees. The tops are green and the stocks black, spotted and sickly around the bottoms. The bark appears dead and has numerous dots. I found a grub crouched in the center of a tree that was dead and dotted. Is this the apple-tree borer? The trees were planted in fence corners, and last spring I dug them up and planted them in orchard style. Quite a number are affected as described above."

[There is very little doubt that the trouble is due to the work of the round-headed borer (*Saperda Candida*), a widely and generally distributed pest. In its perfect state it is a very handsome beetle about three-fourths of an inch long, cylindrical in form, of a pale brown color above, with two broad creamy-white stripes running the whole length of its body; the face and under surface is white, the antennae and legs gray. The females are larger than the males, and have shorter antennae. The beetle makes its appearance during the months of June and July, usually remaining in concealment during the day and becoming active at dusk.

The eggs are deposited late in June, during July and most of August, one in a place, in an incision made by the female in the bark of the tree near its base. Within two weeks the young larvae are hatched, and at once commence with their sharp mandibles to gnaw their way to the interior.

It is generally conceded that the larva is three years in coming to maturity. The young ones lie for the first year in the sapwood just beneath the bark, excavating flat, shallow cavities, about the size of a silver dollar, which are filled with their sawdust-like castings. Their presence may, however, be detected in young trees from the bark becoming dark colored and sometimes dry and dead enough to crack. Through these cracks some of the castings generally protrude and fall to the ground in a little heap; this usually occurs in the spring of the year. On the approach of winter the larva descends to the lower part of the burrow, where it remains dormant until spring, and then goes on eating away at the sapwood, doing great damage. Here it works until the following year, when it emerges a mature beetle, after drilling burrows sometimes through the tree. The larva is of a whitish color, with a round head of a chestnut-brown and the jaws black. It is without feet. When full-grown it is over an inch long.

Remedies.—The most effective remedies are of a preventive nature. Alkaline washes or solutions are probably the most efficient, as it has been proved that the insect will not lay her eggs on trees protected in such washes. Soft soap reduced to the consistence of a thick paint by the addition of a strong solution of washing soda in water is perhaps as good a formula as can be suggested; this, if applied to the bark, especially about the base or collar, and also extending upwards to the crotches,