

decided facilities for the propagation of the flea. Entomologists differ as to whether the fleas ought to be placed in a small order by themselves (*Aphaniptera*), or whether they should form an abnormal family of the two-winged flies (*Diptera*). As they agree in almost every respect with the two-winged flies, except in having but the mere rudiments of wings, the latter seems the preferable course. After all, these questions are questions rather of words than of things, and of taste rather than of science. It is commonly supposed that the flea that infests the dog is the same species as that which infests man; and that, consequently, dog-fleas can exist, flourish, and multiply in bed-chambers where there are no dogs. All entomologists, however, are agreed that each species of flea is peculiar to a distinct species, or at all events to a distinct genus, of animals; and we have descriptions of some ten distinct fleas, inhabiting respectively man, the dog, the cat, the squirrel, the hedgehog, the mole, the mouse, the bat, the Australian porcupine (*Echidna*), and the domestic fowl. We have ourselves found a small species upon the young of the common racoon. No doubt dog-fleas, if they shift their quarters from dog to man, may cause considerable irritation upon the human skin for a few days, or even weeks, just as chicken-lice, under similar circumstances, will sometimes do; but that they can increase and multiply upon such unnatural food as human blood is an entomological impossibility.—*American Entomologist*.

ENTOMOLOGICAL SPECIMENS may be sent, for identification or for information respecting history and habits, to the office of the CANADA FARMER, or direct to the Entomological Editor, Rev. C. J. S. Bethune, Credit, Ontario. The postage should be pre-paid. The specimens should be sent in a pasteboard or other box, not loose, but packed with cotton wool, or some similar material. The name and address of the sender should also accompany the package, not necessarily for publication, but as an evidence of good faith and that we may know where to apply for further information if necessary.

Entomologists will be interested in the matter of "snow fleas," which have swarmed in New Brunswick the past winter. The *St. John Journal* says these singular little insects (resembling in their motions the name-sakes living in houses,) completely covered the surface of the snow for miles in some localities; in the horses' tracks, and in the ruts made by the sled runners, they were an inch or more in depth. On the 29th of March last they were especially plenty, and some small spiders were noticed among them. The snow flea is somewhat smaller than the common flea. It is quite black. On taking a quantity of them in the hand a strong sensation of cold is produced. The south wind and soft weather generally bring them. They are often found in the snow two feet from the surface and when brought to the light exhibit the usual animation by which their motions are characterized.

Apiary.

To Get Bees out of Honey Boxes.

I have never had much difficulty in getting boxes filled with nice honey; but I have had great difficulty in getting the bees out of the boxes after their removal from the hives. I have taken off boxes early in the morning, at mid-day, and late in the afternoon; have set them near the hive, and away from the hive, covered and uncovered, with smoke and without smoke; in short, have tried all sorts of ways. Still, many bees, after leaving a box, would return for a second load of honey and bring with them a swarm of hungry robbers; so that it was impossible to leave removed boxes until the last bee had been driven or coaxed out, and every hole covered. This took too much time, and I sought a better plan. Why not set the boxes on an empty hive, in some remote part of the apiary? That worked very well for a little time; but the robbers soon saw through this arrangement. Then I must have some kind of door or outlet to the hive, through which the bees could pass out, but not return. That was soon devised. A piece of tin was placed over the entrance, with four holes cut in the lower edge, about the size of a bee, and each hole covered, on the outside, with a small isinglass door, hung on a bit of fine wire, so as to work with the utmost freedom and the least possible friction. All the light admitted into the hive must pass through these little isinglass doors, and thither the bees within flocked. The slightest push against one of these little doors was sufficient to open it, the bee passed out, and the door shut behind him. Hundreds of bees followed him with the same result. This was most satisfactory. But wait; here comes a bee back for a second load. Now for the test. Can he enter? You may be sure he will try. He does try every door—but fails. Bees are coming out of one door while he is trying to enter another. Presently one opens the door he is at, and in goes our little thief. By this time half a dozen have returned, and in ten minutes more the experiment has proved a failure; for in that time they have learned to push the doors to one side, and without difficulty. This might have been remedied by putting a pin at the sides of the doors, to prevent their moving sideways. But the plan was abandoned for something else that occurred to me just then, which I put in practical operation with entire success. Not a bee got into the hive after that. I could leave a hive with a dozen boxes (resting on slats put across the frames), go to dinner or down town, or leave it all day, and be certain all the time that not a bee could enter it from the outside; and every bee within could leave at any moment with perfect freedom. The plan adopted was simply that which is used in a certain kind of rat-

trap in common use, and the application was made in this way:—Through a cork bore a hole large enough for a bee to pass through; cut ten or a dozen pieces of fine wire, say each an inch and a half long, press one end of these wires into the cork around the hole, and so near together that a bee cannot pass between them. Let the outer ends of the wires converge together, leaving an opening at the end just large enough for a bee to pass out through it. Put the cork to the entrance of the hives, with the wires standing outward, and slanting up a little from the alighting board, so that the bees from the outside can pass under it, while trying to get in. Close the entrance all round the cork, so that all the light that enters the hive must pass through the hole in the cork. This will bring every bee within to this hole, for a passage out. I will guarantee it to work perfectly.—*Cor. in American Journal*.

Improved Method of Swarming.

Where bees are left to have their own way in swarming, it is found sometimes that one colony will throw off swarm after swarm, nearly swarming itself to death; while some of the families that came off are feeble and worthless. Then again, another colony, full of workers and rich in stores, and which should afford at least one good swarm, will do no such thing, but hang out and threaten, and yet make no decided movement. The following arrangement, it is said, will prove a remedy for this state of things. Suppose I have ten colonies, all numbered, as they should be. Number 1, on examination, is found to contain ten queens in embryo, and is therefore capable of supplying ten colonies, if the young queens are not destroyed. Number 1 inaugurates the movement and sends off a good strong swarm. Very well. Hive them, and give them their position. Now number 1 has lost half its numbers, and for the present its inhabitants are all in excited commotion, and they are now ready to receive new comers. Remove number 2 to a new stand, and place number 1 on the old stand of number 2. The workers of number 2 that are out in the fields, will, on their return, flock into number 1, and when day closes number 1 is again strong in numbers and immediately concludes that it is best to send off another colony, and in about a week a second swarm will come off, hale and strong. Number 2 has lost enough of its numbers to make a swarm; it has indeed swarmed through number 1. It has a prolific queen and is rapidly augmenting its numbers every day, and will soon make up its loss. Meantime number 1 must be placed on the stand of number 3, and number 2 may be taken to the first stand occupied by number 1. Number 1 will be filled right up again as before, and in a day or two will send out another strong vigorous swarm, with a young queen. And thus the process may go on until ten swarms, all strong, have all come through number 1. This plan has been recommended, and is said to work well. It looks reasonable, and is worthy of trial.—*Cor. American Bee Journal*.