

properly called fertile workers) also produced. When such a colony is discovered early in the season, it is best to remove the queen and substitute a good one, when the colony may be built up into full strength. As it was too late in the season with my colony for this the bees were brushed from the combs, those containing honey were placed in the caps of other hives, for the bees to carry the honey below. When it is all removed, the combs will be preserved for another season. A colony depopulated by reason of the loss of the queen, or a drone layer, is generally invaded by moths; many charge them with the destruction of the colony, when the true cause is the destruction of the queen.

It is delightful working in the apiary, during these warm, sunshiny October days, breathing the fragrance of the rustling, falling leaves. A great deal has been said *pro* and *con*, with reference to bee-culture as employment for women and invalids. A letter before me, from a very successful bee-keeper, says: "I am an invalid, and have been for the past thirty years—ever since I was sixteen years old—but bee-keeping has prolonged my life, and has given me new interest in living." Other letters on my desk, from women widely separated, show an increasing interest in this absorbing pursuit. Yesterday was rainy, and I tore up "Indian Head" into sheets to cover the bees. I picked off all ravelings, and piled them smoothly on a board, so they can be handled nicely, and free from wrinkles, when I use them. It adds greatly to the pleasure of bee-keeping to have everything ready for use before the bees are disturbed. The surplus honey has all been removed, and I take a wide chisel and scrape off all propolis and comb from the top of the frames, then I am ready for Hill's device.

This is placed over the frames and under the sheet, forming a chamber for the bees to cluster in, and permitting them to pass freely from one comb to another, even during a zero freeze. This prevents bees from starving with plenty of honey in their hives, as it is well known many of them do, they being unable to get to their stores without passing over icy combs. Corn-cobs or sticks might be used in lieu of it, when it is not to be had. Let the sheet be large enough so that when it is spread, the

cap or upper story shuts down upon it, thus preventing any possibility of a bee getting up. I have chaff cushions to put above the sheets of those hives wintered upon their summer stands, but if I was situated so I could procure it readily, I should prefer to have the chaff loose. Forest leaves or sawdust answer the purpose, where chaff is not to be had. I take a hot smoothing iron and run it around on the edges of the sheet to melt the propolis and stick it so fast that no bees can get out of any of the hives stored in the cellar, no upper storey being put on there. Little "comforts" made of cotton and muslin are spread upon the sheets, and the hives are set one upon another, with sticks at each end, to insure ventilation, and keep from breaking down the devices. Bees that are to be stored in the cellar will remain upon their summer stands until the middle of December, with chaff cushions above the frames. It is well to have all the internal arrangements of the hives completed during pleasant days so that the bees will be able to arrange matters to suit themselves before freezing weather.

MRS. L. HARRISON.

Peoria, Ill.

## QUERIES AND REPLIES.

UNDER THIS HEAD will appear each week, Queries and Replies; the former may be propounded by any subscriber, and will be replied to by prominent bee-keepers, throughout Canada and the United States who can answer from experience, as well as by the Editor. This Department will be reserved for the more important questions, others will be answered in another place. We hope to make this one of the most interesting departments of the JOURNAL.

### BEEES PACKED IN CHAFF IN BEE-HOUSE.

QUERY No. 40.—Would bees winter safely in a bee-house so constructed that each colony would be enclosed with chaff or sawdust packing, the same as in a chaff hive, with arrangements to close the outside entrance tight on the approach of winter, and give them ventilation from underneath inside, where the cold winds cannot blow in upon the bees, even though the temperature inside the house might be nearly as low as that outside?

DR. C. C. MILLER, MARENGO, ILL.—I doubt it.

H. D. CUTTING, CLINTON, MICH.—Can see no reason why they should not.