Experience has taught him that they do not winter well facing the north. The plan of the bee house is about as follows: Shaped as an L, say 20x14 feet; this gives him a room on the 14-ft side for a work room 8 feet square. The sides opposite the hives are used to store frames, boxes etc., and to hang up tools, etc., necessary for the apiarist. There is a skylight in the centre of the roof arranged with a wire screen that can be turned over at will by pulling a string. The object of this is twofold. First, it catches all the bees that fly off while manipulating the combs; it also prevents robbers from coming in and holds them till the manipulator is through with that hive, when a pull of the string turns them all out doors.

Another advantage and a big one for Mr. Y., is in having his bees all in a bee-house. He can go away and leave them locked up and nothing can meddle with them. He uses a box 3x4 inches with a full sized sheet of foundation (flat bottom) fastening it with a Mallery fastener. He markets the honey himself, i. e., he seeks a market among grocers in Brooklyn who pay him a good price, appreciating the neat box and clean tidy-looking crate that holds them. Mr. Y. is very successful in wintering his bees just as they stand in the bee-house, simply packing them with chaff or chaff cushions allowing the entrances to remain open. He has a plan of ventilating the hive which I will not explain here as he may not wish me to do so. Mr. Y. has met the foul brood problem to his sorrow, but he came off a conqueror, I think he said by the Muth system. He could give you some rich experience in that line if called upon. He has now a very handsome strain of bees whose qualities for working and gentleness are unsurpassed. Mr. Y. enjoys this little side business very much, as does his wife also, who helps him in a good part of the work. His vocation in Brooklyn being a school teacher he has one day of every week at his disposal as well as a long vacation in summer, at the beginning of which he moves at once with his family to his Highland apiary and gathers new strength as well as new honey and ducats, to spend in the winter campaign for souls, for I forgot to tell you that Mr. Y. is the leader of a large mission school, also in Brooklyn. Like the bees he loves, he is a worker.

From Blue Point apiary I crossed the old Hudson again and sought the "Knickerbocker Bee Farm," located at Pine Plains, N. Y., an account of which I will give you later.

THEO. O. PEET.

Arlington, N. J., Sept. 7th, 1887.

Prairie Farmer.

BEES IN THE RED CLOVER.

W. H. W., Pierce Co., Wis., asks: "Is it a fact, if there were no bumble-bees we would have no clover seed?"

There are many plants in the economy of nature, dependent upon insects for the fertilization of their seed, and red clover is a striking example. The well-known flower, bleeding-heart (*Dicentra spectabilis*), bears no seed, being a native of North China, and its fertilising moth has never been introduced into this country.

It is claimed by some that Italian bees work upon red clover, and denied by others. I think that under certain conditions they do, as when the heads are very small by reason of drouth, these bees are able to reach the nectar.

The first crop of red clover, although the most luxuriant, yields very little seed, so little that it does not pay growers to thresh it. The reason for this is that there are so few bumble-bees at this season, as only the queen and a few workers winter over. But by the time the second crop blooms, there are plenty of workers to do the work assigned them. It appears to be their special mission to fertilise this clover, as they do not store sufficient honey to be of any use to mankind.

Waldo F. Brown, a prominent writer on agricultural topics, wrote last year to the *Philadelphia Press*, that he never before harvested such a large crop of clover seed, and before cutting, destroyed more bumble-bee's nests than he ever saw before on the same amount of ground. By so doing, it appears that he willingly killed "the goose that laid the golden egg."

It would be well for agriculturists to ascertain, before destroying insects, whether they are friends or foes to their interests. In Australia no clover seed was produced; and ascertaining the reason, bumble-bees were introduced, when it bore seed in abundance.

Red clover is a very useful plant, and during the severe drouth, when the blue-grass was dry and brown, I noticed the bunches of red clover among it growing luxuriantly. As these insects are absolutely necessary for the production of red clover seed, they should receive better treatment from agriculturists than heretofore, as it is a common practice to send out a man or boy, at certain seasons of the year, to destroy every nest that can be found, for fear they may sting the horses while fall plowing.

This may be necessary on land that is to be plowed in the fall, but where their nests are located in meadows, they could be shut in as easily as to destroy them, and let out after the crop is secured. The nest could be marked in