

under it, and in a short time I put on the third, which they also filled, and all three were finished and removed early in July, and contained about fifty pounds of nicely capped honey, and yet those sections at the side were not half filled, in fact, some of them were hardly touched at all.

My poor success with side storing may all be due to some mismanagement on my part, but I have tried to follow Mr. Doolittle's directions as given in some of the bee papers, have placed combs of brood back of the sections to facilitate the work, but then the pollen difficulty comes in, perhaps I ought to say that I have not found it so very difficult to get strong colonies to work at side storing so long as they have no other room to work, but just as soon as room is given on top they show a decided preference to go up higher. No doubt Mr. Doolittle has made a success of side storing, but I have not, and if his eye happens to fall upon this article I hope he will set me right in the matter, and whilst he is helping me out of difficulty, he may be helping many others also.

For top storing I have not yet tried any arrangement for holding the sections that pleases me better than broad frames which hold one tier of sections, and made reversible, any desired number of those can be used according to the condition of the colony, or the season, or any other circumstances, and they can be easily clamped together so firmly that they can be handled, carried about, tiered up on the hive, and reversed at pleasure, and when filled with honey can be loosened and separated in one minute. The best way to get the sections out of the frames is to press them out with a follower. The so called "Heddon Case," made without any partitions in the middle having tin 1 rests to support the sections and used with separators is also a good arrangement, but I should like it better if it could be reversed. I am an advocate of reversing sections, but when you come to brood frames, let me ask if it is not possible for the novice to make a mistake in this as well as in spreading brood frames?

PERFORATED ZINC.

I believe the Jones' perforated zinc to be a perfect queen excluder; have used it two seasons with entire success; have never had a queen pass through it to lay any eggs in the supers. Last summer I accidentally placed a comb containing some eggs, in the upper story of a hive being worked for extracted honey, with a zinc honey-board between the upper and lower story, and the bees built some of the nicest queen cells that I ever saw, and matured them all ready to hatch, and the queen below did not seem to know anything about it. I think I shall experiment

some in this matter next summer. Perforated zinc may yet become quite an important factor in the queen rearing business.

FEEDING SUGAR.

Before closing I want to say a few words about the mischievous effects of feeding sugar to bees. I am glad to see that the subject is being agitated in the bee-papers. It is no great wonder to me that the public mind is suspicious of adulteration and fraud, when the practice is so persistently urged by so many apiarists, not only for winter stores, but we are sometimes advised if there happens to be a dearth of nectar in mid summer, to resort at once to feeding sugar to keep the bees breeding rapidly, this of course sounds plausible in the ears of the bee-keeper; but how does it sound to the consumer in these days of adulteration, when it is so difficult to get a pure article of almost any kind of food from the general market. Bee-keepers may all be perfectly honest, yet they have been accused of fraudulent adulterations, and suspicion has been aroused against them, and so long as this suspicion lurks in the minds of consumers, they will likely use honey sparingly. But assuming that there is no adulteration of honey, nor any suspicion of such to injure the market, let us reflect a moment and figure a little. We are told that there are 500,000 bee-keepers in America, we do not suppose, however, that they all feed sugar for winter stores, but let us suppose that one of every five of them feed 100 pounds of sugar of an average annually, that (if I figure right) would amount to the respectable little lump of 10,000,000 pounds or 5,000 tons, and as a matter of course throws an equal amount of honey upon an already dyspeptic market. Now if we just allow the bees to have enough of their own natural stores for food, we shall by so doing save ourselves the trouble and expense of extracting all this large amount of honey, which we sometimes have to go around begging to get some one to buy, and then go and get an equal amount of sugar and reduce it to syrup and feed it back to the bees. And farther, we relieve the honey market of just so much weight, which might allow it to float more buoyantly and pay better prices. I have never fed sugar only when I did not have honey enough to do the necessary amount of feeding with, and am resolved not to feed it in future unless driven to it by necessity.

It seems to me that some people are trying to run the bee business upon a "high pressure" principle, regardless of any comfort, convenience, or choice which the faithful little laborers may have in the matter; no doubt bees have their preferences as well as other animate beings, and when managing them why should we not have