

stands vacant and should a swarm issue from one of these pairs you could take an empty hive from the next nearest pair. It is much better to have one for each causing less work and confusion. Those bee-keepers who have no swarms have no need of any provision for them, as for myself I prefer never extracting from the center of the brood nest, and in fact doing little or no extracting until after the swarming is over, and so have honey well ripened, and not be hurried, and at the same time produce part comb honey, so that with strong colonies I generally have one swarm from each. To tell you the truth I am in love with this having the hives in pairs. I keep a record in a book of each queen, her age and pedigree, but it is greatly facilitated by this plan and in walking through your apiary you can tell at a glance every colony that has swarmed and those that have not. A hive on the right hand stand occupied shows a swarm from the hive in the left, an empty hive means no swarm. Then the queen in the hive on the left is always the old queen, and the other the younger, unless you have introduced an old one there. When you unite, all things being equal, always remove the old queen so you need never have a queen more than two years old, unless in those colonies which do not swarm, or any you may desire to keep for a longer time. With an apiary thus arranged you can laugh at those troubled about "how to prevent increase." You simply decide as to the number of colonies you purpose keeping spring count. Arrange your apiary accordingly with one vacant stand corresponding with your number of colonies in the spring. Either sell the increase or double them up in the fall or at some other time and bring your apiary back to the same number each year. When you take your bees from their winter quarters, if you have more colonies than one for each pair then place them on the stands reserved for the swarms, and before swarming time sell or use them to strengthen all weak colonies, so that every hive will be ready for the honey flow immediately it appears. I would just say in conclusion that the very best blocks or stands I believe to be, are round cedar posts, say six inches in diameter, cut to the length desired. The spile to remain up is then levelled off slightly, and the other set an inch or two in the ground or just enough to make it solid. Each pair wants to be on a level with each other, with an incline to the front. By placing a little earth in front and sprinkling some salt thereon, you will have what neither insects nor weeds care about. I would say that since I had my own apiary arranged in this way I have

noticed Dr. Miller advocates having the hives in pairs, also one or more writers, but I do not think sufficient prominence has been given to it. I might just say that by arranging an apiary as described here there will be one hive on each alternate end of each row, which will necessarily be single. In another issue I will describe my plan of numbering and recording, and also how I enable the young queens to find their own hives at mating time.

G. A. DEADMAN.

Brussels, Ont.

For the Canadian Bee Journal.

THE COMBINATION HIVE.

SUGGESTED IMPROVEMENTS, EXTRACTING FROM BROOD CHAMBER, SAVING SURPLUS COMBS.

I HAVE just been perusing your article on the Combination hive and fully endorse most of what you say respecting it. Though perhaps, one of the best all-purpose hives in use, yet it is capable of improvement in several respects. I think, as you yourself admit, that it is a little too small. During the honey season the frames become so completely filled with brood that there is very little room for winter stores. I have found brood in every frame and the only place where any quantity of honey was deposited was in the outside of the two end frames. This is entirely inadequate for winter supplies, and so unless feeding is resorted to after brood rearing ceases starvation will follow. Now, of course, one could save some combs well filled and sealed from the second storey, used for extracting, and put sufficient of these in, taking out some of the combs from the brood chamber which contained the smallest quantity of stores; but this leads to considerable disturbance of the bees at a season when they are likely to be very cross and when there is danger not only of them stinging the manipulator but also of destroying the queen. I would much prefer to have the brood chamber in such a shape at the close of the honey harvest that there would be no need of distributing it afterwards and hence I think that one or perhaps two frames should be added to the Combination hive and then it would be amply large to contain a good strong colony of bees, and afford all the room required for the storage of winter supplies. Then I think you would have a hive about as near perfection as it is possible to get according to the light we at present possess. I have used the Jones hive from the commencement of my bee-keeping and used to think it was all that could be desired. I went in for extracted honey, practised artificial swarming, or rather increase by nuclei when in-