

good combs and feed them on sugar syrup for winter stores. The combs built by the bees can be patched up to the best advantage, the old hive placed directly behind. The old stand can be treated thus, shake almost six days after swarming a good many bees from the comb adding them to the new swarms in front and either utilize the comb in another place or put the hives on new stands and let it build up for winter. I am never troubled with second swarms. The location of an apiary has much to do with swarming. In places where the air can freely circulate the amount of swarming will be reduced, the nature of the soil even will have an influence. I like the apiary on sod and the hives to be placed under the outer edges of the shade trees. I never give in the production of comb honey any upward ventilation, and herein lies an important secret towards securing white and clean sections. The bees resent such a current of air, and when given begin to propolize, and soiled sections are a result. A quilt should not be used unless a heavy cushion and a heavy lid be placed above to prevent the bees from pushing the quilt off. I like a honey board and a quarter inch bee space above the combs. Shade boards are used on top and even sides of hives. They are a great advantage. It is unnecessary to say that n. one can engage in the successful production of comb honey with one super only, and yet there are many who think such a practical economy. Before the advent of the bee escape I drove bees out of the comb honey supers by spreading over them a cloth dipped in a weak solution of carbolic acid, the cloth being wrung almost dry before spreading. This works very well, but the bee escape still better. My system is to produce a certain amount of comb honey. This prevents cull sections, except in very exceptional seasons. Nothing has been said about any kind of feeding. To feed back extracted honey means to put upon the market comb honey which will quickly granulate and this will displease the customer, and is therefore undesirable. To feed anything else should never for a moment be listened to, never be even thought of. To practice it would surely bring swift retribution. Only a choice article should be aimed at even if we never exhibit, for by so doing we place ourselves to a certain extent out of reach of competition. We command highest price and a ready sale.

R. F. HOLTERMANN.

Brantford, Ont.

R. L. Taylor asked why hive on starters. Mr. Holtermann stated what he had in

view was to get the most out of the bees, the largest quantity and best article.

Mr. Taylor thought that we did not want to use starters for comb honey. He hived four swarms on foundation, four on starters, four on combs. Everything was weighed—bees, hives and all. The bees were hived the last week in June. They were weighed June 19th. The swarms were of different weight. Those on starters gained the least. As to upward ventilation, Mr. Taylor practiced it and did not consider it objectionable.

Mr. Holtermann thought such experiments of great value. At the same time one experiment could not be taken as absolute, neither would Mr. Taylor claim such to be the case. A swarm of 5 lbs. would not gain as much relatively as a swarm weighing 7 lbs as it took a certain number of bees first to keep up the requirements of the colony. Again colonies often gave very marked differences in results, when with present appliances there was no perceptible difference.

R. L. Taylor—A group of each one weighed 7 lbs., 7½ lbs., and 6 lbs.

E. Kretchner, Red Oak, Iowa—The honey flow makes a great difference.

N. D. Wert, North Middleburg, N. Y.—I agree with Mr. K's views as to length of season. A great deal depends upon how we hive the bees. I used to favor starters. If the season is full and short the bees first send the honey in surplus boxes. I hive now on five frames. The bees must go above. I have between four and five hundred colonies.

R. F. Holtermann—Our honey season is short. I never look for a fall flow.

Mr. Stewart—If I had lots of time I would use dummies. I used to favor starters. I take the sections from the hive from which the swarm issued, whether partially worked out or not.

R. L. Taylor—I divided the time into three periods. The result was on starters the bees gained least the first week, the second they did better, and the third they gained most.

Mr. Abbott thought there was no necessity for bringing in such accurate work. The greatest objection to the experiment was that the work of bees varied so much.

Doctor Mason spoke very strongly in favor of Mr. Taylor's work, so did Mr. Holtermann. The latter thought bee-keepers did not value experimental work as they should. They were not sufficiently alive to their own interests.

Chas. F. Muth, Cincinnati, O.—I believe no one underestimates experiments. They