

vast proportions, and the demand grows apace. The Carr-Stewarton, Cheshire, Rayner, Neighbor, Abbott, Cowan, Quinby, Langstroth, Bingham, Heddon and Howard hives are all described, greater attention being given to the Heddon than to any of the others because of its having but lately come upon the market. The author has some faults to find, but at the same time he finds many good points, which overbalance the poor ones. He objects to the compression of frames by thumb screws, and in this objection he has been borne out by quite a number of those who have used the hive. See our remarks under this head in "Our Own Apiary," page 126. In the Jones-Heddon hive, which was shown at the Indian and Colonial Exhibition, Mr. Cheshire found a number of what he considers to be improvements. One of these is that the "whole of the outer cases whether for breeding or honey," were in all respects alike and completely reversible. Speaking of the hive and its principles generally, he says: "It is narrowness, not patriotism that would deny to one of another country his full need of praise, and I conceive that the unprejudiced will not dispute that the half bee-space in each hive-section and in the bottom-boards; the narrow, abutting edges giving possibility of rapid handling; and the general invertibility of the whole, although associated, perhaps with some crudities, yet mark another hilltop, passed in the progressive march of practical apiculture. Mr. Heddon and Mr. Jones have also, by their hives, brought prominently before us, and have done not a little to settle a question which has been much discussed—viz., the most desirable interspace to allow between brood combs. Mr. Heddon makes his frame ends  $1\frac{1}{8}$  ins., while Mr. Jones allows  $1\frac{1}{4}$  ins. in full, or more accurately  $1\frac{3}{8}$  ins., a plan which resulted, apparently somewhat to his own surprise, in the building of worker cells, to the exclusion of drone cells, narrow strips of foundation only having been given." While thanking the author for the compliments paid in the above, we must protest that our surprise was not so very noticeable, when we found that narrow spacing precluded to a great extent the possibility of the building of drone-combs. For

years we have advocated that starters of foundation in frames placed between full combs and closely spaced would give us the result desired.

The conclusions of the author with reference to the statement that inversion is a certain means of preventing swarming because it "destroys the larvæ in the queen cell," are in accord with our own observations. He says: "It is sufficient, at present, to remark that this is only partially true, and that dependence upon mere inversion for non-swarming is delusive."

With reference to the painting of hives, "light colors are preferable" says the author "because they both radiate and absorb heat less than dark ones."

\* \* \* \* Bees have the color sense strongly developed, and so are considerably assisted in marking their location by variation in this respect. Where hives are crowded together, the operations of the apiary (often involving the removal of a hive from one spot to another) will be greatly facilitated by having interchangeable roofs, made as dissimilar as possible in tint, while the whole of the hives are alike. Where a hive is removed the roof remains, and so no difference is made in outside appearances, the bees, as a consequence, returning unhesitatingly to their old station and entering the new hive as we desire." What we wish to note is the idea of having the hives all one color and the covers of a different. Have any of the readers of the BEE JOURNAL tried this plan of moving colonies, and leaving the hive covers in the same place. If so, with what results?

The next chapter treats of "Natural Increase" and it will, with succeeding chapters receive attention in future issues.

For the Canadian Bee Journal.

#### BEE NOTES FROM SWEDEN.

WINTERING IN LAT.  $60^{\circ}$ .—SCHROKER'S CURE FOR FOUL BROOD.—QUEEN-EXCLUDING SECTION FOUNDATION.

**M**R. BRAY'S underground clamp came too late to be of any use to me; consequently I put my hives in the ground as usual, covering them with 34 inches of straw and 12 inches of dirt. I hope they will all winter successfully. This winter the thermometer showed  $22^{\circ}$  and farther up in the country  $37^{\circ}$ .