

new colony, will go there immediately on their return from the field. Now, by leaving these old colonies with the entrances turned in an opposite direction for a number of days, then gradually moving the entrances back to their old positions, when the balance of the working force which has accumulated with these two hives is transferred to the new colony, the old colonies may then be carried away and set up in some other part of the yard, or may be turned round facing another direction, moved sufficiently far from the new colony to allow it to catch all the bees. We do not say that this is Mr. Alpaugh's plan, because he has not placed us in possession of any facts in connection with his secret, while we believe it consists in the way by which he manipulates the bees, so that they may all feel perfectly at home in the new colony, and start to work immediately, and also the plan of getting the balance of the bees out of the old colonies after they have increased to a good large working force, and so deprive them of all their field bees, which discourage and prevent them from swarming. In fact it takes them all their time to build up to a sufficiently strong colony to go into winter quarters, or to gather sufficient stores for winter. Mr. Hutchinson gave us the plan of using starters instead of full sheets of foundation in taking comb honey. Mr. Alpaugh uses them for both comb and extracted, getting all the white honey even in sections, or in supers filled with comb placed on top for extracting purposes. We have argued very strongly of late the necessity of preventing a too large consumption of honey during the height of the honey harvest, in rearing young bees. By this plan it is easily seen that very little brood will be found by this system in any of the hives, as the old colonies are too weak to carry on brooding extensively, and the new colony has to build all the comb before it has a place for the queen to deposit eggs. There will be a great saving in that way, and many of the bees that might be occupied in feeding and caring for brood are left at liberty in the new hive to go forth to the fields and gather honey. Thus every available bee can be used, and instead of getting the honey from two old colonies—and say four swarms, one from each is usually the

case—it is all obtained from the one hive, and you get more surplus in proportion than you would from the two. We have made some tests in the above lines, but always desiring increase, never carrying it on to the extent Mr. Alpaugh has, but we were fully convinced, after talking with him, that we stopped our experiments too soon. It will be seen that this system when thoroughly understood, will be simple, and will keep down the increase; because if you so desire, you can put the two old colonies into one, which would keep the increase down entirely, or at least would only increase one half. Mr. Alpaugh is wonderfully enthusiastic over his plan, and feels certain that a day of prosperity is dawning upon the bee-keepers of the world. ¹¹⁶ If positive, from his extensive practice of the plan, that all that is claimed for it can be accomplished; and we consider him fully entitled to any reasonable remuneration, and to the honor of first bringing this system in its new form before the public. He is convinced that while it possesses no disadvantages, it possesses so many advantages that its value is far more than can possibly be imagined until it is tested.

Here is an opportunity for some one to distinguish himself. Who will invent a kind of food that bees can be wintered on without the loss of a single colony, without dysentery, with the smallest consumption of food, and have the bees come out in the strongest possible condition, with the least loss of vigor or vitality during their long confinement? Supposing a few bee-keepers were to make some tests. If we can ship bees and a queen that will go from 12 to 36 days in cages, in all kinds of temperatures, passing through the various climates, is it not possible, with an extraordinary small consumption of stores to winter successfully colonies without any honey, except that contained in the ground sugar, and a few combs or sticks to cluster on. We would suggest that some of our professors or best bee-keepers take a few colonies, each one inventing his own style of hive, or wintering box, and manufacturing the food to suit himself, placing them in various temperatures. This will enable us to take all our nice white honey for the market, and if the repository in which they