have noted closely, but still I may be wrong. Let us hear from others on this point.

Port Allegany, Pa.

[Yes; the editor wrote advisedly. Basswood trees are rapid growers. We know of trees which furnish a profusion of bloom after being set out ten years. Young trees, 6 feet high when set out, have been known to furnish a *fair* amount of blossoms after five years, in favorable localities. During a good yield of basswood, colonies of bees will frequently pay for themselves in ten days. Basswood honey often comes like a shower, in good seasons, giving the bees all that they can do to take care of it.—ED.]

How to Prevent Swarming.

G. W. DEMAREE.

When discussing this subject the temptation to argue the question, rather than to rely on a simple description of the manipulation resorted to, to accomplish the object in view, is very great. So many apiarists have imbibed the idea that some sort of contraction of the brood-nest is essential to the production of comb-honey, if not the extracted article, that any new discovery that runs counter to this idea of contraction meets a deaf ear, if not open opposition.

Let me say, once for all, that when a new discovery is applied to an old system, it often becomes necessary to revise the old system to accommodate it to the newly-applied discovery. These remarks apply not exclusively to the old system of bee-culture, but to all systems pertaining to all industries. Those persons who are determined to stick to the old paths of the past, are not in position to profit by any new discovery; and this essay is not written for that class of readers.

When your apiary is as large as you want it, what would you give to be able, by a simple, practical manipulation at the beginning of the swarming season, to hold all your colonies in full strength of working and breeding force steadily through the entire honey harvest? You can do it beyond a doubt, by practicing my new system of preventing swarming; and if you have the ingenuity to apply proper management to suit the *new condition*, your surplus yield will be larger than by any other method heretofore made known to the public.

I have practiced the new system largely for the past two seasons, and my surplus yield was never so large, though it is well known that the past two seasons were not above the average as honey-yielding seasons.

As I have already intimated, my plan of preventing swarming, and entirely preventing increase, is accomplished by one single manipulation right at the commencement of swarming. Only one hive and its outfit is used for each colony. Any system that requires a divided condition of the colony, using two or more hives, is not worthy of a thought.

In my practice, I begin with the strongest colonies and transfer the combs containing brood from the brood-chamber to an upper story above the queen-excluder. One comb containing some unsealed brood and eggs is left in the brood-chamber as a start for the queen. I fill out the brood-chamber with empty combs, as I have a full outfit for my apiary. But full frames of foundation, or even starters, may be used in the absence of drawn combs.

When the manipulation is completed, the colony has all of its brood with the queen, only its condition is altered. The queen has a new brood-nest below the excluder, while the combs of brood are in the center of the super, with the sides filled out with empty combs above the queen-excluder.

In 21 days all the brood will be hatched out above the excluder, and the bees will begin to hatch in the queen's chamber below the excluder; so a continuous succession of young bees is well sustained.

If my object is to take the honey with the extractor, I tier up with a surplus of extracting combs as fast as the large colony needed the room to store surplus. Usually, the combs above the excluder will be filled with honey by the time all the bees are hatched out, and no system is as sure to give one set of combs full of honey for the extractor in the very poorest seasons; and if the season is propitious, the yield will be enormous under proper management.

The great economy of this system is, all the colonies will produce as nearly alike as can well be—a condition of things that never occurs in any apiary swayed by the swarming impulse. If my object is fancy comb-honey I tier the section-cases on the super that contains the brood, and push the bees to start all the combs they can; at the

close of the season I extract the honey from the combs in the super, and feed it back to properly prepared colonies to have the partly-filled sections completed. The nicest honey in sections that I ever produced was obtained in this way.

To feed back successfully, requires as much experience as any other work connected with the art of producing honey, but the theme is too broad for a place in this connection.

The system above described works perfectly if applied immediately after a swarm issues. The only difference in the manipulation in this case is, that no brood or eggs is left in the brood-nest, where the swarm is hived back.—*Read at the Ohio State Convention.*

Christiansburg, Ky.

Making Double-Hive Bottom-Boards.

I. E. MYERS.

On page 293, in detailing my double-hive bottom-board, I stated the size as being 32x62 inches. This is not right; the size, not including the alighting-board, is 20x36 inches. The passage from one hive to the other is cut out of the top rim of the bottom-board. These rims are ⅝ of an inch thick by one inch wide, nailed on each end of the boards, the size of the hive being 16¼x18 inches, inside measure. This completes the department of the brood-chamber, and receives the body of the same, which is ¼ of an inch deeper than the brood-frames, making ⅛ of an inch for a bee-space under them.

On page 479, Mr. M. Miller says: "Thick top-bars are all that is claimed of them. But how about that exact spacing? Must we adopt close end-bars to get the exact space? Is not the cure worse than the disease?"

I will try to give the answer to the above query. Thick top-bars and rigid frames are my favorites, but not the close-end frames.

I make my frames half-closed and half-open end, in the following manner: Hold up a frame in your hand, with one end next to you. Take ¼ of an inch wide off the right side of the end nearest you, and ¼ of an inch off the left side, from the end away from you, so that on changing the frame end for end, it will show the diminished side always to the right.

Now drive four No. 9 double-pointed tacks crosswise on the side diminished, near the top and bottom, two on each end; this will fill the place of the wood planed off in the rigidity of the frame, and allow ¼ inch bee-space to save their bend in the manipulation of the brood-chamber, and save also lots of propolizing joints between the ends of the frames. For the same reason I hang the frames on a nail driven in the end of the top-bar, in place of letting the top-bar extend in on the grooved edge of the brood-chamber of the hive.

Grant, Minn.

Spring and Summer Bee-Management.

HENRY STEWART.

In treating this subject, I would make special emphasis of the great importance of always keeping ahead of your work, and the management for next Summer should begin in the Winter, in the way of doing all such work as the making of hives, filling sections, etc. Always be sure you are fully prepared for a good honey season long before it reaches you.

During the months of August and September I had the pleasure of traveling over several counties in Illinois, Iowa and Wisconsin in search of cheap honey. On this trip I visited more than a hundred prominent bee-keepers, besides many smaller ones, and in response to the question, "What did your bees do for you this season?" it would be astonishing to see how many answers would be like this:

"Well, we had a good flow from basswood, and we got lots of swarms, but we were so busy with other work that we could not give the bees the attention they needed, and we didn't get much honey."

Too many bee-keepers are like the Arkansas traveler's house—when it does not rain their house does not need shingling, but when the "honey-showers" come, they are in no condition for shingling.

Spring management should begin with the first warm days of early Spring. If bees are wintered in the cellar, a close watch should be kept over them, to know that they are resting quietly until the weather is sufficiently warm to put them out on the summer stands, when the hives should be cleaned out and the light ones, if any, marked for feeding.

If wintered out-of-doors, the first work should begin by ascertaining the condition of each colony in the apiary as to stores. This can easily be done by taking hold of the front of each hive and