gather the honey necessary for their own use, which is much more than many imagine. Of course, the amount of this work collectively, varies according to the number of bees; that is, a strong colony has more work to perform than a weak one, but the proportion per bee, other things being equal, decreases as the number of bees increase. The stonger the colony the more they are able to do for their owner. Hence there may be bees to just provide for themselves, when under the same conditions, twice the number of bees would give the owner a surplus of 6 lbs per day. I think the idea is so clear that even the beginner will understand. Now supposing it takes 20,000 bees to balance accounts, and bees are hatching at the rate of 2,500 a day. When there are enough bees in that colony to have a large number storing for you, then they swarm. Two homes have now to be provided for before the bee-keeper can get returns, and two colonies have to be provided with winter stores where there was one before, and the result will be that, although your apiary may increase, your returns have decreased. I venture to say that the conditions where it pays to go in for increase at the sacrifice of surplus are rare. Even a beginner who sails into the business with flying colors will, in the end, find that he could have made as much progress if he avoided undue increase—in short, work for SURPLUS not INCREASE. Many swarms generally give weak colonies to go into winter quarters, and these are not desirable for that purpose.

Now how shall we prevent undesirable increase? By giving the bees room in time, giving them enough of it, shading and ventilating the hive. I believe also that where the bees are placed closely together and they are excited by many neighboring bees flying, they are more inclined to put on the swarming impulse. Supers should be put on the hive before the bees get the swarming impulse. Generally the drawing out of the cells along the top of the combs is an indication. Now in comb honey, over half of the bee-keepers of our country are trying to economise by using only one super with twenty-four or twenty-eight sections. Where are the bees going to be storing honey while they are giving the finishing touches to their sections? They have the brood chamber pretty full before. Echo says where? This not only gives the bees the swarming impulse, but they lie comparative idle until they do swarm when they might be gathering so much a day. Call a man foolish who would allow his grain crop to shell out standing in the field. The principle is the same. When one lot of sections are beginning to be capped and you have reason to expect more, raise it and put under another super. In extracted honey two supers can be used to good advantage, although, many do not believe this. Full sheets of foundation in the sections and foundation in the frames.

Now for ventilation! Instead of entrances sometimes three-eighth inches by about five, have them clear across the front of the hive, and when hot weather comes put a wedge at each side of the hive and between it. Make the bottom board of a seven-eighths inch piece square, the length of the side ripped across diagonally, giving two pieces, seven-eighths at one end and coming to a taper at the other. This closes the sides of the hives and enlarges the front entrance seven-eighths inches across the front of the hive. Shade should be given, protecting the hive from the rays of the sun during the warmest part of the day. Then hive the new swarm on the old stand. All this tends to prevent excessive swarming, and it will cheapen the cost of production to many. This article is a great deal longer then I intended it should be when I began.

Spring Management of Bees.

—A. BRIDGE.

The paper on "The Management of Bees in the Spring", by Mr. Sparling, is very good. He speaks of setting bees out part at a time. I used to set my bees out in this way, part at a time, and have found it to be a bad practice, so I now set them out all at once. The first lot set out will take their cleansing flight, and mark their location, and then they are ready for robbing. The second lot set out will take their cleansing flight, and the lot set out first will commence robbing those coming later. I don't have much trouble with my bees robbing, since I adopted the plan of setting them all out at once. I believe in setting out early in the spring. If there should come a cold spell after they are out it will do them no harm.

I am not particular about having every hive sit on its old stand. I am of the opinion that the bees mix up considerable