

from clover commences. Now, from a great deal of experience in this matter, I know that if a swarm, either natural or artificial, is hived on a full set of drawn combs, that from 25 to 40 pounds of this white clover honey will be stored in these same combs, when, if frames with only starters are used, most of it would be in sections.

Another thing, a swarm that is hived on drawn combs will often swarm again when these combs are full, instead of going to work in sections. But if empty frames are used, and they get started to work in the supers soon after being hived, they seldom attempt to swarm again.

When supers are placed over drawn comb it is perhaps needless for me to say that no work will be done in the sections untill the comb below is filled with either honey or brood.

One thing I might say against drawn comb for swarms is, that here at least, a swarm, natural or artificial, is more apt to desert when hived on them than when empty frames are used. There is, though one great disadvantage about using empty frames, and this is the matter of drone-comb. In this locality a good deal of drone-comb that a swarm, either natural or artificial, builds will be used to rear at least one generation of drones in, that same season; and a swarm that has an old or failing queen will build a good deal more drone-comb than one with a good queen, for this reason.

It is very important, when hiving on empty frames, to have strong, vigorous queens. I have found that where it doesn't pay to artificially swarm a colony until they make preparation to swarm naturally, no matter how strong they may be. But if they are to be swarmed artificially, the sooner it is done after they begin to construct cells the better. If they are not swarmed until they are about

ready to swarm naturally, especially if they have one or more sealed cells, they are, after being swarmed, almost certain to swarm out or desert the hive the next day, even if a frame of brood is left them. On the other hand if they are swarmed before they begin to start cells it seems to discourage them, or at least they do not work with as much vigor as they would if swarmed later.

I notice that great stress is laid upon the matter of getting all the bees to fill themselves thoroughly with honey at the time the swarm is made. But this makes no difference whatever so far as their staying in the hives or the way they work. In fact, with me they seem less inclined to desert the hive the next day if they are not made to fill themselves thoroughly when swarmed. This deserting of the hives the next day is one of the greatest drawbacks to artificial swarming I have to contend with.—C. Davenport, A. B. J.

### Use of Foundation.

Full Sheets are More Profitable—The Fallacy of the Crowded Brood-Nest.

A few days ago, while looking over my bee-papers for some information, I came across several articles about the use, and abuse of foundation. If I have not misunderstood the writers, the only point considered was the amount of wax saved to the bees by the foundation given, or lost to the bee-keeper, in case the bees could have secreted that amount of wax just as well. This seems to me the smallest side of the question, if that expression can be used. But before going further, let me make a comparison. Suppose you have a brick wall 32 feet long by 20 feet high. It takes 4 feet of space to accommodate a brick-