

area of the four clusters, but it will have sixty-four inches of brood raising area; four times more than all the six-inch clusters, and sixteen times more than one six-inch cluster. Raising brood takes no heat from the bees. Wherever non-living matter, throughout nature, is being changed into living matter, heat is eliminated. When active growth is taking place in the chick in the egg heat is given off, and the incubator has only to prevent the too great loss of heat given off. When an insect larva commences to eat it commences to give off heat, and the more larvae the bees can keep growing in their cluster—the more nutrition and growth is going on in the cluster. A cluster fifteen inches in diameter equals in volume nine five-inch clusters, but the brood raising area or the heat generating area, is over thirteen times greater in the large cluster than it is in all the small clusters combined. The advantages of the large cluster must be apparent and they are founded upon facts not easily controverted.

The late Mr. Dadant gave as one of his reasons for adopting a large hive, that at the commencement of his bee keeping career he met with a case of a colony of bees in a large box (three times larger than the common hive), which he found upon inquiry had never been known to have been without bees for twenty years, although numerous colonies in small boxes adjoining could only exist for short periods. It was evident that the large colony escaped from whatever ills destroyed the small colonies, and Mr. Dadant, in his experience as one of the most successful apiarians of his day, never found that he had made any mistake in adopting a large hive. He never went into the hive-making business with a view to selling and trading in hives.

It is not the bees, but the bee-keepers that want small hives. Dr. Gandy says that if we put up barrels and kegs to catch absconding swarms the barrels will be first occupied. Swarming is mostly an effort of the bees to find a larger home, and the only way to lessen swarming is to give the bees a larger hive. Bees in temperate climes will never be able to compete with bees in tropical climates until they get more room to work.—A. W. Smyth, M.D., Donegana, in Irish Bee Journal.

Bulk Comb Honey—Its Demand, Its Production Profitable.

"Bulk" or chunk comb honey is a commodity very little known among Canadian bee keepers since the advent of the honey extractor and whilst to us production in this way would be a retrograde movement and very unprofitable the method has many advocates in the south among them Mr. H. H. Hyde who writes as follows in the Texas department of the progressive bee-keeper:—

A few years ago bulk comb was practically unknown, but to-day there is hardly a bee-keeper in the United States that has not heard of it and how it is produced. It is now the principal product of the south-western Texas bee-keepers. Its production is rapidly gaining ground not only all over Texas, but is gaining a footing in Nebraska, Colorado and Utah.

The demand from the consumers for this article is rapidly growing and is keeping far ahead of its production, and of this fact the bee-keepers are readily catching on. There are many reasons why it is gaining a hold with both the consumer and the producer and especially the former.

When he buys a can of bulk comb honey he feels sure that he is getting