jolting without breaking loose, which is important where the sections are to be taken some miles over rough roads for use.

WINTERING BEES.

Much of one's success will depend on how bees are wintered. If well wintered, it is usually an easy matter to get them strong by clover time. I have wintered my bees most extensively out of doors in double walled hives. All that is essential is a good colony of bees, twenty to twenty-five pounds of good honey or sugar syrup, and the brood nest made small by the use of division-boards and thoroughly packed on all sides, top and bottom also, with wool, chaff, sawdust, leaves or fine shavings—I have used all these with entire success. The entrance should be kept free from ice or dead bees. If a large sack is made of cheap cotton and filled with planer shavings for the top covering, it can be easily removed for the examination of bees or to pack away for summer. The rest of the packing can remain on the hives during summer without harm. The hive that I formerly made for this purpose, with an under entrance, that has been patterned after so extensively, I have discarded, preferring to have the bees enter from the front, and experience proves that bees winter much better in such hives than those with an under entrance. Yet after more than twenty years' experience with hundreds of colonies, I am persuaded that for the colder sections of our country in-door wintering is to be preferred where one can command a cellar or other place where the atmosphere can be maintained at a proper temperature from early November until late in April.

The temperature that suits me best is from 50° to 55° in the early part of the winter, and 5° to 10° cooler the latter part of the season of confinement.

The temperature should be as high as possible and the bees remain quiet, which will doubtless vary with other conditions.

I have found that when the honey-board is raised one-eighth inch at one end, bees remain much more quiet at a given temperature, and the comb is much cleaner than when no upward ventilation is given.

SPREADING BROOD.

Much has been said and written about building up bees during early spring by changing combs, putting combs of brood from the centre of brood nest to the outside, and putting empty combs, or those having eggs or larvæ in the centre; but this practice is almost sure to fail of its object in the hands of a novice, and an experienced apiarist ought to have little use for it unless for a few weaklings.

A much better way, to my mind, is to reduce the brood nest to what combs each colony can cover in early spring, say May 1st, and then increase the size of the brood nest as required. Then if the colony is of fair size, with sufficient stores and fairly enterprising, it will be strong by clover time. A little feed between apple-bloom and clover, if a colony is short of stores, is very helpful in pushing forward a large amount of brood. Nearly all drone comb should be removed from the brood-nest that workers may be reared instead of a horde of hungry drones.

As clover comes into bloom most hives should be full of bees and brood with but little honey or empty combs.

If any weaklings remain, take two, or more if necessary, and unite the brood combs, getting as many as possible in the above described condition.

WHEN TO PUT SECTIONS ON.

As soon as honey comes in freely, put one clamp of sections on each hive, cover it with enamelled cloth, laying the honey-board over that.

If honey is abundant, most colonies will enter sections and begin work at once. Still, we often find some colonies strong enough, yet refusing to do anything in our surplus department. Whether the workers in such hives are trying to emulate the easy life of the drones, or are discussing the propriety of emigrating, I do not know. Usually exchanging their clamps for one partly filled will set them at work. Queens of such hives had better be exchanged at once.

SWARMING TIME.

Abaut this time the heart of the bee-master is happy. The beautitul snow white combs, in perhaps hundreds of hives, are daily increasing in size, while the purest nectar is sparkling from each tiny cell, while to his utter disgust the work lags in many hives, and eggs and larvæ are found in queen cells. Soon a harsh, heavy sound announces that swarming has begun hive after hive is left nearly empty of workers, and work in sections is entirely neglected, while the honey harvest is swiftly passing away. What is to be done? If we multiply colonies it is at the expense of surplus honey, unless the season is longer than most of us enjoy. Mr. Heddon, of Michigan, gives a method by which he claims nearly all mature bees are secured with the new colony, and surplus storing but slightly interfered with, while the old colony never casts a second swarm.

I have tried this method very carefully the past season with Italian bees, and found about every other colony would cast a second swarm.