

One beekeeper describes his method of packing, after taking out of the cellar, somewhat as follows: 'e puts chaff or straw on the ground for the hives to rest on to keep the bottom dry and warm, sawdust cushions on top, straw piles up around the sides and backs, boards leaned against the straw to hold it in place, and large telescoping covers placed over each hive. If any colony is weak and does not cover the required number of combs when set out, he removes unoccupied combs, crowding the bees to the side of the hive with a division board, putting packing in behind the division board. The bees are left with this packing around them until they are strong enough to need room and ventilation.

A beekeeper writing from Northern Ontario, has a collapsible winter case, which he puts on each hive, packing with two or three inches of shavings on sides and top, practically giving the colony as much protection as many beekeepers give for outdoor wintering in Southern Ontario. The main point is to see that the hives are warmly protected and sheltered from cold winds during the period of spring building up. This seems like a little extra labor, but will be well repaid in the additional amount of honey gathered during the honey season.

SPRING FEEDING OF BEES.

Success in beekeeping depends on having the hive boiling over with workers just at the beginning of the main honey flow. This condition is obtained by conserving the strength, and thus prolonging the life of the workers which have wintered over; also, by making conditions as favorable as possible for rearing young workers. We have seen how the rapid breeding of young depends on cluster temperatures. There is another factor of equal importance which must now be considered; that is, the productivity of the queen and the nutrition of the larvæ.

Aside from cluster limitations, which depend on population and temperature, the queen's laying is affected by her vigor and the way she is fed. Her vigor depends on her original vitality and the amount of work she has done. Age and breeding are important factors here, also wintering. A vigorous queen, after her winter's rest, will lay eggs in the spring as fast as a colony can care for them, provided she is well fed. Her food is obtained from the younger workers of the hive, and is a milk-like substance produced by glands, located in the head, which pass the food down into the mouth, where it is handed out to a hungry queen or larva, as the case may be. The production of this food is quite involuntary, and depends on the amount of honey and pollen consumed by the worker bees. As the queen is producing eggs at the rate of hundreds daily, she requires frequent nourishment, and must seek it from workers about her in the hive. To a great extent her egg-laying will be in proportion to the ease or difficulty with which she is able to obtain food in this way, and that will be in proportion to the number of young bees in the hive and to the extent to which they are producing this food; and that, again, will depend on the supply of honey and pollen in the hive and the extent to which it is available. Honey which is sealed in the combs will be used by workers in the preparation of this food; but unsealed honey, or that which has just been brought in, is used more freely. It will be seen from this chain of statements, that for rapid brood-rearing in spring, it is important not only to have plenty of stores in the hive, but to have part of them not sealed and close to the cluster, so they will be handled and consumed by the workers. The handling of honey, either from the field or from feeding, must stimulate the production