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re the freely cirsoon absorbs the t away as frozen nciples employed rate the two syss in winter quarfree from impure ht call the warm other the cold

sperience and obunpopulous colony on. Especially is s are not of good short in quantity out the hive with ar the contracted in, some kind of in localities where ontinued, in a cold 1 low altitude. It and unprotected eat a proportion of at protecting crust that there is not a bees remaining to the main body of s outer crust, where uld be maintained, less dormant and able to minister to my as to heat and all, or nearly all, I for the more dor-

ny perishes. of packing I have ed about every form gether in bunches or eir adjoining sides 1 boards, bodies or d be placed four a or southeast and I be left exposed to id the northeast and inch may be packed if desired and the ce with boards and) and baling wire. I lan in case of weak second tier of four

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or five on top of the first, with covers and bottoms removed from between the two tiers and these replaced by single sheets of tin or sheet iron. To form temporary bottom boards of these metal sheets a bee space is formed on their upper sides by tacking strips on the sides and back.

To avoid confusion the entrances are contracted and separated as far as practicable, with here and there a sheet of tin shoved in between the hives. The removed bottoms and covers are used to retain the packing or to protect the bunch of hives from storms. No mixing of bees need be feared when separating the hives in spring upon their summer stands, since the appearance of the whole yard is entirely changed at once. This should be done when few bees are flying and all locations will be marked by the bees on their first flight.—From Beekeepers' Review.

RIPENING HONEY ARTIFICIALLY

The Plan, While Possible Under Certain Conditions, is Not to be Advised Generally.

BY W. B. BRAY

I was pleased to see the remarks made by Mr. Ireland, president of the Canterbury Beekeepers' Association, in your issue of May 1, regarding the artificial ripening of honey, and wish to confirm what he says. Mr. Hopkins has had a great deal of experience, and has done much good for the beekeeping industry in this country; but in this one thing I do not think his experience is conclusive. There is more than Mr. Hopkin's reputation as a beekeeper depending on a proper understanding of the subject, and I trust he will not be offended if I help to throw a little light on the conditions prevailing in New Zealand For close on to three years I was permanently engaged as a government apiary in-

spector, and my work took me into every part of New Zealand.

In his article on page 632, Oct. 15, 1911 Mr. Hopkin's admits the possibility of another factor in the ripening process than evaporation-namely, a chemical change in the sugars. This would be the continuation of the process of inversion commenced by the bees, by which the proportion of sucrose is gradually reduced. For this reason alone it would be desirable to leave the honey on the hive till later in the season. Though it may be merely a matter of taste, the editor is right when he says that the honey which has the finest aroma is that which is extracted from well-sealed combs. It can be called flavor, aroma, bouquet, body bite, or anything else, but the quality is there. I remember extracting some honey which had been on the hive all the winter, and entering it in the show which was held too early for new season's honey to be entered. The judges said that mine was the only sample that had a good flavor.

But it is in the process of evaporation that a good honey can most easily be spoiled if it is attempted artificially, as then it depends entirely on the state of the atmosphere. Every one knows that a certain amount of water is held in suspension in the air. The amount will depend on the nearness to the sea, the nature of the soil, the configuration of the country, the temperature, and the variation between night and day temperature. For instance, in the hottest weather in my own locality the nights are cool and even cold, so that the moisture evaporated during the day is precipitated. A wind off the sea will lose its moisture in crossing a high range of mountains, and become a dry wind. A very rainy district does not necessarily have a humid atmosphere. It will depend, then, on the temperature of the air. In a warm climate, near the sea, and over low-lying land, the air is heavily laden with moisture. The humidity in

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