

In time this skin dissolves into the general mass, but not until the absorptive tendency of the honey has ceased, for a time at any rate. I will have more to say about granulation shortly.
G. B. JONES.

Toronto.

For the CANADIAN BEE JOURNAL.

Does Light Injure Honey.

HIS is the caption of an article written by Mr. G. B. Jones and published in last issue of the C. B. J. I think Mr. Jones is right in discarding the theory that exposure to light hastens the chrysalization of honey. I do not pretend to explain or to fully understand the chemical process carried on in the granulation of honey but am sure that its free exposure to air hastens it. This may be verified by repeatedly pouring out honey in a small stream; by doing this honey may be made to granulate in a very short time the motion of its particles in running off may facilitate the work, but I am sure air is a more potent element in this work than motion, and that light has nothing whatever to do with it. This may be verified by heating honey up to near the boiling point and thus expelling the air with which it is permeated. If poured into a vessel while hot and comparatively free from air and then hermetically sealed it will not granulate for years no matter to what degree of light it is exposed. This is a clear enough evidence to me that light is not a factor in the granulation of honey but that air is.

I think the explanation of the bees removing the honey from the outer comb may be found in the fact that bees like to carry on their operations in the dark and in accordance with this desire they removed the stores to comparative darkness. They worked to store it where they liked best to have it.

R. McKNIGHT.

Benefits of Bee Culture.

I SEE by the British Bee Journal that a great deal of time and money is spent by the benevolent in teaching the science of bee-culture. Father Langstroth used to say that if he did not make any money out of his invention, he should be satisfied if poor people who were not able to keep a cow, and have milk and butter, could learn how to keep bees, so that their children could have honey on their bread. Father Langstroth may yet live to see his wish verified, at least in the British Isles. This fostering of the industry may cause the product to be very cheap and cause a loss to specialists, but the society no doubt has at

heart the greatest good of the greatest number. If our population was so thoroughly instructed in bee-culture as they are in Great Britain, honey would soon be as cheap as milk.

BENEFITS OF BEE-CULTURE.—People who look upon bee-culture only from a pecuniary standpoint take a very narrow view. A hive of bees represents a great deal more than the honey and wax it contains, it has a good system of government, and is the only one known to the world in which the executive and officers are females. All the members of this community work together for the common good, and with a purpose. Whoever saw a bee that was gathering pollen fly off to see if a bee gathering honey was idling? No; every inmate attends strictly to her own business, not looking to the right or left. Such order, neatness, and dispatch, is not discernable in any other community.

The British Bee-keepers' Society is not only assisting people in a pecuniary point of view but elevating them to a higher plane of thought and action; it cannot be otherwise. Bee-culture is an educator of a high power, all the senses are quickened, the eye notices plants and bloom which before were unnoticed as useless words; the ear quickly discerns the note of a swarm, the cry of the robber, the hum of plenty, or the mourning wail of the queenless. The sense of smell tells us of the blooming of the linden, buckwheat and other flowers.

THE SEASON OF 1889.—The past two seasons were nearly failures of the honey crop, and this season has been much better, though scarcely up to an average. It has been a great season for increase, enough honey was coming in to keep up brood-rearing. Bloom has been very abundant, while at times the sun was very hot there was a cool-breeze, and the nights at times were uncomfortably cool. The winds appear to have much to do with the secretion of nectar. I put back all swarms except the first whenever possible, and this made a deal of work. I will have the rent of my hives, and in many instances I could not collect in any other way than by extracting the outside combs. In this climate bees are loath to build comb in the fall, yet if they have empty combs, will fill it with thick honey for winter stores. I have no fears but what these combs will be refilled before winter.

WOMEN - BEE-KEEPERS.—Judging from my own correspondence, and other sources, women as honey producers are on the increase. I see in a late *Gleanings* that a widow had the management of one of Mr. Manum's apiaries, and that one sea-