

has become too large an interest here to be shipwrecked by the carelessness of any man or body of men. It brings to the Western husbandman an increasing. Let it be guarded respect.

For our Eastern brethren to be careful send in response to orders; and let men know that they are ordering where they get only what they want.

HOW TO GET RID OF THE DISEASE.

Remove and bury the bees, and burn the hive of the colony and its contents, as soon as the disease is discovered. There are remedies recommended to be taken; but a efficient and safe if as cheap as the

### Wax and Honey.

Prevalent opinion respecting the origin of wax and honey, as expressed in treatises on bee-culture, and as implied in the definition of the terms as given by the dictionaries, are essentially erroneous. The curdling is derived from these sources, is contained in the honey or pollen, and is extracted by some process in the stomach of the bee; while honey is supposed to be the nectar of flowers. Precisely the reverse of this is the fact.

Wax is a product elaborated by the bees. An experiment will suffice to demonstrate this. If bees be fed with a concentration of loaf sugar and then confined in a jar between their abdominal rings thin plates of wax, such as they use in their combs. Now, probably no one would expect to maintain that loaf sugar contained in the elementary ingredients of that substance, carbonic acid, hydrochloric acid, and oxygen—which become separated in the stomach of the bee, and re-combined in different proportions and relations, thus resulting in the formation of wax.

Wax is otherwise in the case of honey. This is in the proper sense the product of the bees, and is a substance collected by them from the flowers and stores supplied by nature.

The matter collected by the bees undergoes a change before it is deposited in the cells. It is the nectar of flowers and freshly gathered in all their constituents and properties the same substance. Both have a sweet taste and an aromatic flavor. If we sip from the calyx of the honeysuckle, we find that it has precisely the taste of fresh honey. When I analysed the wax (from *Thymus thuyae*) which exudes in large quantity from the calyx of the flower, I found it composed of sugar, gluten, and an aromatic principle—which are the constituents of comb in its pure state.

I fed a colony with a solution of sugar colored with indigo, scented with lavender, and diluted with milk. When the bees had carried this into the cells of a new comb, no difference could be perceived between the contents of the cells and those of the feeding-box—they had the same color, the same taste, and the same smell.

b. If honey or the nectar of flowers remain in the cells, it will in process of time undergo a change. But this change is produced spontaneously, and not by the intervention of the bees, except merely so far as the internal heat of the hive may tend to accelerate it. It results, first, from the gradual evaporation of the aqueous particles contained in the nectar of fresh honey, till a certain degree of consistence is attained; secondly, from the still more gradual dissipation and loss of its agreeable aroma; and, thirdly, from the ultimate conversion of the more saccharine cane sugar, which constitutes an ingredient of the nectar of flowers, into the more insipid grape sugar—a change which all honey undergoes with the lapse of time.

DONHOFF.

### Miscellaneous.

**BENEFIT OF BOOKS.**—The great multiplication of books is sometimes spoken of as an evil, but this is true only in one sense—viz., so far as they are superficial or trashy. When there is a prevalent propensity to authorship, it is a natural incident that there will be a great deal of frivolous writing, or that the same ideas will be often reproduced. The effect of the periodical literature of the present day on the public mind is, in my judgment, not favorable to a muscular tone. Newspapers, literary magazines, and the like, must, in order to please popular taste, consist of light but various material. They are suggestive of many interesting inquiries; but this is of very little value to any but systematic thinkers; and generally the effect is only to distract the mind and impair a habit of consecutive thought. It is true that those who think much are also great readers, even of this fugitive sort of productions. This is partly relaxation, but also for the new ideas which may be derived from a heterogeneous source, when there is a strong power of assimilation. Such reading may be compared to a conversation of the gossiping kind, which may be supposed to be of no great advantage; yet Sir Walter Scott said he never met with any man from whom he could not learn something in conversation. So of books: it has become almost a proverbial saying that there is none that does not contain something that is valuable. Macaulay's History of England indicates an omnivorous habit of mind; materials are turned to valuable account which we should hardly have supposed would have attracted the