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OF HEREDITY BEE-KEEPER.

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be so good as to their usual reports tions and prospects son? We wish to s as well as of the ill not be published it. A postal card ng a great amount nation.

POLLEN FAMINES PREVENT BROOD REARING indexed

Eggs, But No Larvæ

In the Australasian Bee-keeper, R. Beuhne illustrates in a most striking manner the value of pollen to the beekeeper. There is but little likelihood of the condition of things described by Mr. Beuhne occurring in this country; nevertheless, bee-keepers will be much interested in this fresh testimony as to the necessity of pollen to the bee in brood-rearing. We will give Mr. Beuhne's own words:

Up to the end of November pollen came in freely, principally from black wattle and thistles. The last day of the month was the hottest day for the season-106 degrees in the shade here. Since then there has been very little pollen of any kind at the home apiary. There was, however, a considerable accumulation of pollen in the combs, and colonies have been keeping up broodrearing to a moderate degree. 7th, a large swarm issued from No. 91 at the out-apiary. Dec. 8th a swarm, also large, from 201 at the home apiary. I hived both on starters as an experiment—No. 91 on a new stand as No. 253; No. 201 on the old stand. As honey was coming in more freely at the out-apiary, I put a rack of 28 sections on 253, but only an empty hive body below 201 (to give more space for clustering). I examined both Dec. 13th and 14th. Combs were well under way, all worker and well egged, no larvæ yet and no pollen in combs. Dec. 21st, No. 201 showed some half-dozen young larvæ and a few cells of pollen, eggs in profusion.

No. 253, same date, eggs in all combs, no larvæ, no pollen, sections half filled. Dec. 29th, No. 201, combs nearly fin-ished, a fair supply of pollen (flat weed), eggs hatching into larvæ nor-

Same date, No. 253 (out-apiary), combs nearly complete, sealed honey along top bar, eggs in profusion, no larvæ, no pollen, sections sealing.

Jan. 4th, No. 201, normal as to brood. No. 253 (out-apiary), still eggs only, no pollen; removed 16 finished sections. Now here is a strong stock with a good queen and a fair honey-flow still without a single larva 28 days after hiving. If this were the only colony I possessed I would think that the queen laid dead eggs; but during this period I have examined the brood chambers of all colonies in both apiaries, and find that at the out-apiary, where there is an absolute dearth of pollen, all colonies which have exhausted their stored pollen are in the same condition, viz., eggs, but no larvæ.

From the experience with the two swarms, as given above, it will be seen that not a single young bee can be raised without pollen, and we may assume that even the brood, which is raised during a time of scarcity, does not receive its proper share of nitrogenous food, and the resulting generation of bees cannot be expected to be as long-lived, vigorous and diseaseresisting as bees reared under normal conditions.

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"DETERMINATION OF SEX IN POULTRY"-AND IN BEES

In the Fruit Magazine (Vancouver), the Rev. W. N. Scott makes the assertion that "The Determination of Sex" stands as the greatest economic problem of the poultry industry. We should not regard the article in question as possessing any importance or interest for the readers of this Journal were it not for the fact that Mr. Scott had appealed to the case of the honey-bee in support of his contentions. "We are al familiar," he writes, "with the three classes of inmates of a beehive as queens, workers and drones, or as fertile females, imperfect males, and males." On first reading this passage, we supposed the very obvious error in referring to the workers as "imperfect males" to be due to a misprint. But as the writer of the article is endeavoring to prove that "intensive feeding," together with other factors, largely determines sex, it is clear that he is under a wrong impression as to the nature of the worker bee.

The selection of the bee by Mr. Scott as furnishing evidence in support of his contention, is exceedingly unfortunate. The bees, in fact, afford an