of the comb is without an equal in its mathematical correctness, its economical construction, its capacity in proportion to precious wax used, and the wonderful delicacy of the prepared material, to which add the fact that this wonderful fabrication is produced by a throng of insects in a dark hive, and I feel sure you will ask, Where is the dividing line between instinct and reason?

The comb cells are fifty to the square inch, being twenty-five on each side of the comb, so that a comb one foot square will give breeding room for 7,200 bees, and a twelve-framed hive has a capacity of 86,400 cells. The thickness of the rhomboidal base-plates is 1-230 of an inch; the hexagonal walls are much thinner, being only 1-353 of an inch in thickness, but these partitions have a thick edge or coping of wax, which adds much to their strength, enabling the bees to travel over their delicate structure without breaking the extremely thin walls. Scientific men have tried to account for this wonderful cell-building instinct, but I think their explanations fall very short in unraveling this very difficult question.

I now come to pollen. It is more difficult to explain all connected with its use —that is, as to the amount collected and used in feeding larvæ, etc. Pollen is the only nitrogenous food used by the bee, and large quantities are consumed during active brood-raising. I should think it a conservative estimate to place the quantity used at five pounds per colony of 50,000 bees, being about one-half grain for each bee raised, and used in capping brood-cells. This pollen, as we all know, is the active fertilizing agent in plants, and is absolutely necessary to the bees' welfare. The brood will starve without it, even when surrounded with honey, and at times of scarcity the bees will use rye meal or mill dust as a substitute. When the pollen grains are of such a nature that they will not pack in little pellets, as we usually see it on the legs of these insects, they will dust their bodies in the farina, and so carry home the precious food.

In gathering this food, the bee always confines its labor to one specific blossom or plant for each load, and if a cell full of pollen be cut through, the pollen will be found in layers of different colors—light yellow, dark yellow, brown or green. When a bee arrives home with a load, she inserts her two loaded hind legs into a cell and with the middle legs rubs the pellets off and takes no further notice of them. The nurse bees now moisten the pollen with honey, and pack it down with their heads and mandibles; it is always stored close to the uncapped brood, so as to be handy when wanted. Nothing will so stimulate breeding as a supply of fresh pollen; without it the newly-hatched brood will die in twenty-four hours.

When we take into consideration the ease with which this insect can be domesticated and brought into subjection by man, which he cannot do with any other insect and give it freedom; that it will invariably settle in the vicinity of its hive from which it has just swarmed, instead of going off direct to the woods; the freedom with which it surrenders to man, in spite of its formidable sting; the fact that it lives over the winter in colonies, so as to be on time in great numbers when our fruits are in blossom in the spring and early summer; that its food at this particular season of the year is pollen, and the great precaution shown all through its domestic economy to preserve and perpetuate its kind, must go to show and convince us that this wonderful insect is of far more importance to the welfare of man than it is generally credited with.

It is well known that if it were not for the humble bee we should get very little clover seed; they had to be imported into New Zealand before that colony could grow its own clover seed, but these insects are not in sufficient number to be of much service until late in summer, and