pass through. This is a device of the worker bees in Minorca to keep out a predatory beetle that preys on their winter stores. The queen takes no actual part in the construction of these barricades, and they seem to be wholly a device of the worker bees. How is it that the instinct of the worker bees to barricade the entrance to their hive comes to be transmitted by the queen? How is it possible for the queen to transmit instincts acquired by the worker bees, unless they are in some way transmitted to her by the workers? There is but one way in which this can be done.

Worker bees occasionally beget drones, and these drones transmit the instincts of the worker bees through the queen. The laying worker is an exception to the general rule, and the survival of exceptional variations from adaptability to the surroundings is what we call evolution. The exceptional variations in time predominate and become the rule. The intelligence of the worker bees would be of limited use if there were no means of transmitting it from one generation to another. This means of transmission is acquired by laying workers, whereby the drones, so produced, become the means of communicating an hereditary instinct through the queen mother. The product of the professional queen-raiser is not always what he imagines. He has not all the material requisite to carry on the plans of the worker bees, failing, perhaps, in the laying worker, which may not be as accidental as we imagine. Doubtless queens are sometimes killed by the workers in order to bring about a harmony not understood by us.

We as yet know little about bees; and the evolution of the worker bee is still a mystery. It is doubtful if the worker bee is wholly a work of nature; she may be a work of art. Darwin states that the mule is more intelligent than its parents, and is an instance of art improving on nature. Worker bees, in every respect, are analogous to mules, although they are not apparently hybrids. The several developmental stages in the growth of these insects may have given the original queen bees an opportunity of experimenting on their progeny. They found that by starving their offspring while in the larval stage, the nature of these developing insects was greatly altered. The sexual instinct became suppressed, and the social instinct more highly developed, accompanied by an increased industry, an aptitude for adapting means to an end, and an insatiable desire for gathering and and laying up stores. May not millionaires be the artificial fruits and flowers of starvation in the human hive?

That the present relation of the worker bees to the colony was not the original one is highly probable. The limited harvest time, and the necessity for having large numbers to enable the colony to survive the winter and defend the home from enemies, kept increasing the workers until the magnitude of their number changed them from drudges into rulers, and converted the queen into an egg-laying slave, allowed to live, and protected by the workers only in furtherance of her own existence.

That the arguments briefly stated in this article are suggestive and not conclusive, the writer is well aware. However rigid and fixed Nature's laws may appear in the ignoranic world, in organized beings they are wonderfully elastic, and if fixed at all, fixed only for a time. We turn over a leaf in the book of Nature only to find that there is still another page to read.—The Irish Bee Journal.