

his diagnosis. In that case I hardly think we need take as gloomy a view as he has taken of the future of bee culture in Canada.

The next was on "Some Difficulties," by Mr. J. K. Darling, of Almonte. Mr. Darling in his brief paper, raised a lot of difficulties, some of which I fancy we should never be able to get over, and some of which we shall. There were winter losses, spring dwindling, swarming out, "balling" of queens, desertions, and a host of idiosyncracies and peculiarities, and even what Josh Billing would call "pure cussedness," to which the little honey bee is addicted, as well as to gathering honey, all of which greatly puzzled as well as bothered our worthy member, Darling. This is not to be wondered at. The rest of us have been worried over these matters, too. Looking at some of the manoeuvres on the part of the little insects he has evidently come to the conclusion that the bee is a "thinker," and that some of them are a little "smarter than others," and that some of them can "sulk" and so forth, like the higher animal. In fact, they are not all "darlings," but some of them are more like little devils. I believe every word of this as to the "thinking," the "sulks" and other peculiarities which may proceed from the brain and nerve ganglia of a honey bee, as well as from those of a human being. Both have this "dome of thought, or 'seat of gump-pon,'" as the case may be, but we have not, as yet, been able to locate the particular "bumps" in one as in the other. When therefore, we can not cure the "cussedness" of each other, how on earth can the essayist reasonably expect us to cure it in his bees? He imploringly asks us "how to keep the bees at home in the spring like good children; how to make them be kind to their mothers; how to induce lazy or sulky bees to work," etc., etc. For myself I give it up, with the exception of the laziness and the sulks which I sometimes deal with as I would with the able-bodied tramp who is able to work but not willing, viz.: withdraw the "grub" and starve him to it. In the case of the bees, when I find them playing that game I take away their stores and say "work or starve."

Next was a paper by Mr. F. A. Gemmell, of Stratford, on the "Difficulties Experienced in Marketing Comb honey." Only a portion of this paper was devoted to the subject in hand; and the substance of that portion was that the principal difficulty at present experienced in marketing comb honey is the indisposition to handle it on the part of dealers, which has been produced by the sloven manner in which the article

has been supplied to dealers than by producers, causing them so much trouble and annoyance with it as to deter them altogether from handling comb honey.

This is no doubt true, but it is equally true that this sloven work is not traceable to members of this Association, or readers of bee journals, but, for the most part, to the "one horse" bee-keepers, who neither read journals nor use modern appliances.

Once in a while, however, we must locate the dereliction at home among ourselves. I have seen the last fall, supers of sections with propolis stuck fast in the supers, so that the grocer or customer not knowing just how to get them out, often break them in so doing. These sections were not, of course, produced by an old box hive bee-keeper, and any bee-keeper of modern methods, who takes his honey to market in that shape, ought to be read out of the fraternity. The few suggestions of the essay on marketing comb honey were good.

The next paper was a report by Prof. F. T. Shutt, the chemist of the Experimental Farm, at Ottawa, upon "Experiments with Foundation," read by Prof. Fletcher, and commented upon by him. The gist of the report may be summed up as follows: "The weight of the wax produced by the bees is inversely proportional to the amount of wax supplied as foundation." In other words, the more foundation you supply the bees, of the whole quantity needed, the less of course, the bees will have to secrete and supply themselves. It does not follow, however, that it would be wise to supply the bees "all the wax necessary for the construction of the comb." "The production of the wax by the bees is a normal function, and its entire cessation might possibly affect the honey yield or lead to a derangement of the general health of the bees," so says the experimenter. It seems to me, however, that there is a slight misapprehension here on his part. He appears to assume that it would be possible to give the bees all the wax they require. This is, I think, quite impossible. We might, it is true, give them all they require; that is, place it as best we could at their disposal, but it would not be "available" to them. They would not take of it all they actually need. Some, more or less, they would secrete themselves. The other, and more important, point of the report is: "That a dark or deeply-colored foundation gives a dark and unsightly 'fish-bone' in the resulting comb, materially affecting its palatability and injuring the sale."

The moral of this is to use nothing in your sections but the very lightest and nicest foundation. But I would go one