

have uniformly used the name chosen for it by its proprietors, nor have I ever sought to "belittle" or "injure" it in any way whatever. In common with other Canadian bee-keepers, I hailed its appearance as supplying a felt want, I have written for it, and always, I think with becoming respect. It has had my warm commendation. An editorial notice of it written for the December number of the *Rural Canadian*, before the "anonymous correspondent's" second article came to hand, will testify of my good will toward it.

Matthew Arnold lays great stress on "sweetness and light." "A Subscriber" may be, as he says, now "rejoicing in the light," but he might easily have more "sweetness," particularly when writing honied words for the CANADIAN BEE JOURNAL.

WM. F. CLARKE.

Guelph, Nov. 27, 1885.

Well, friends, we think everybody knows now *who* publishes that "Canadian Bee-paper" and as that was principally the object sought, we will let the matter drop, as no good can come of its continuation and we must adhere to the resolution set out in our first issue "good feelings must rule us."

FOR THE CANADIAN BEE JOURNAL.

IS BEE-KEEPING A SCIENCE?

THE remark is often made, that "bee-keeping as a science is yet in its infancy"; but is this so? Is it either a science, or in its infancy? I hazard the statement that a negative answer is the correct one to both queries. I may be asked why? In reply, I will say, that nothing can be called a science that is not governed by fixed rules, always positive and certain under the same condition; and that nothing can be called an infant that has attained its majority so many years as has apiculture. As a matter of fact, the occupation is so far from being new, that it has existed as such for thousands of years; and I regret to say, we to-day are little, if any, in advance of the bee-keepers of the days of Virgil. True it is, that the late advent of frames has given us a certain amount of control over our bees, that the ancients did not possess, and the invention of certain appliances has made the business more lucrative and easy to carry on than formerly; but these points have nothing to do with the real question. It is true also that we have been enabled by means of our superior advantages to learn many facts not known to our ancient brethren, but these facts

have nothing to do with the question of apicultural science. So far as there is any science in the business, the men of olden times knew fully as much as we. They did not, to be sure, know that the queen was the mother of the hive, or that the drones were simply lazy, good-for-nothings, except an occasional one, who died in the performance of the only duty of value he could perform. In this connection I have nothing to do with the science of entomology, for that relates not only to the apis, but to the whole insect tribe; the question with which I am dealing, is bee-keeping pure and simple—the raising of bees and queens either for sale, or for gathering a surplus of honey. If the business could aspire to the honor of being correctly called a science, the bee-keepers of to-day might well be ashamed of their ignorance, and that they have not progressed further in their labors. What are the real difficulties that any one even of less than average ability cannot overcome, save and except those that cannot be overcome, by the wisest and most experienced of us? In a good season, any one can obtain a fair quantity of surplus, and the novice will not fall far behind the most expert. In a poor season the expert will be fortunate if his bees gather enough stores on which to winter, and the novice will not fall far behind in this respect. The rearing of queens is a simple matter, and one in which the beekeeper of small experience will succeed; the one of the greatest experience can do no more. The wintering problem is the one that is yet unsolved, but the novice succeeds as a rule as well as the oldest of us all. Where then does the science come in? Losses in winter are as yet laid to many causes; too much and too little ventilation; too much and too little heat; too few stores, and too few young bees when prepared in the fall; but notwithstanding all these contradictions, bees do survive the severest winters if they have sufficient stores, and under any and all the conditions mentioned above. The latest proposition in the matter is the so-called "pollen theory;" as yet however this theory has no proof in its favor. It is true that something like evidence has been tortured into what is called proof, but the fact that bees do survive the severest winters with large quantities of pollen left in their hives, and do not survive at times when they have no pollen at all, is positive proof that the theory is not correct; and that surviving or not surviving is more a matter of accident than otherwise. To sum up the question from the standpoint I take, we find bees living and dying under the same conditions; and under conditions precisely opposite. If apiculture was and is a science, this could hardly be the case, for certain fixed and