

tions are evidently the result of improper construction, poor workmanship, or the want of a suitable case to hold them. They should be pressed close together, especially from the ends of the case; and for easy manipulation the case should be capable of enlargement.

Let us emphasize the point Mr. Foster makes with reference to keeping the sections *close* together.

For the Canadian Bee Journal.

Dr. Tinker's Wood and Zinc Queen Excluding Honey Board.

It appear from Mr. Heddon's communication on page 9 that he is sadly mistaken in regard to his claims on my wood and zinc honey board. At the outset I wish to state that I cannot answer him by retaliating abusive language. I do not believe in it. It is ungentlemanly and unchristian. Unfortunately for Mr. Heddon, his attack upon me is full of malice and bitterness, especially in the *American Bee Journal*. Yet he is unable to point to one word I have written that is not courteous and bearing my good will. I do not rejoice that he has covered himself all over with the blight of wicked and undignified thought, although he could not have harmed me less and his cause more than by such an attack. I had rather by far, he should have made a manly and honorable defence of his hive and system, and that I should be put to greater stress in reply. As it is, does not the intelligent reader infer that abuse is the most powerful weapon in defence of a hive and system of little merit? Wherefore, if the truth has so wrought upon my friend that he is beside himself, what need have I to answer him else than to refer again to that truth on page 956, vol. III of this JOURNAL?

In this matter of honey-boards Mr. Heddon's claims are a great surprise to me and will be to all when the truth is known. I know not what his motives are, but the discerning reader must infer that there is a deliberate effort on foot to defraud me of my rights and ultimately to deprive me of all credit as the original inventor of the combined wood and zinc honey-board. Since the winter of 1836 Mr. H. has claimed it as an original idea of his own; that also Mr. Hutchinson, Mr. Boyer and myself had thought of the matter "at about the same time," but inasmuch as the invention could be attached to Mr. Heddon's old slat honey-board it should all go together and be known as "Heddon's honey-board." Now it appears very strange that four men should have conceived the same thing at the same time, and especially that three

of these men should reside in Michigan where one of my hives having one of my wood and zinc honey-boards was exhibited by Mr. H. D. Cutting at the State Fair in September 1885. It will further appear more strange when we are told by Mr. Cutting that "Heddon said it was something new and an extra good thing, and I am sure he never saw or heard of such a device before, constructed in that way. Heddon, Hutchinson and myself talked it over at the time." However, only Mr. Heddon has set up any "claim" to it. Mr. Hutchinson frankly gives me full credit for the invention. He says, (page 438 vol. XXVIII of *American Bee Journal*) "During the past two years I have been using the combined wood and zinc honey-board, as first invented, I believe, by Dr. Tinker."

Mr. Heddon is the champion claimer. A little authority, by way of a patent, from the U.S. Government sent him clean daft. He was ready to claim Mr. Armstrong's new hive and every other new thing including my wood and zinc honey board. He gave us the law on patents with the authority of a Blackstone, and woe be to the man who should oppose him! How it turned out we all know. When faced by the foe he took to his heels ingloriously.

Mr. Heddon may have tacked zinc strips on his honey-board but he did not antedate me even in this; and a year before that I used a wooden queen excluding honey-board and then tacked on tin strips, one of which I sent to Mr. Doolittle. But none of these expedients are to be compared with supporting perforated zinc in saw kerfs made in the edges of the slats.

It now appears that all Mr. Heddon had to base his claims upon was the tacking of zinc strips on his honey-board and that was as far as he had got. He had not invented or conceived of a practical queen excluding honey-board at all. Finally he concedes it to be "morally" mine, and not so very long since advised me that he would have applied for a patent upon it.

I now leave this matter for the general public to decide whose invention it is and to whom is deserving the credit.

As to Mr. Heddon's statement that four rows of perforations in a wood and zinc honey-board are "more than ample" I am perfectly willing he should "go on record." It will probably turn out as it has in regard to open side sections and several other matters where he has gone "on record" that his record was not worth the paper it was written upon. It is quite useless now days for any man to set himself up as possessed of infallible authority on any subject. Mr. H. has made no experiments with two rowed zinc and hence knows not whereof he writes, and