

does not discriminate well. When he quotes these words for example "the quietude desirable for safety," he does not distinguish between the "quietude" and the result of it, viz., the state of dormancy or torpor which secures the "safety." I admit, and have repeatedly stated, that intelligent bee-keepers have long been aware of the fact that "bees winter best in a quiet condition," but it is only of late, and since I promulgated my theory, that they have recognised the true reason why they do so. It is because the "quietude" is the main condition of their settling down into the slumber of hibernation. It is the same with human sleep. Quiet induces repose. The quiet is a condition and repose is the result. It would seem that absolute quiet is not essential to sleep. People who reside near Niagara Falls get accustomed to the roar of the cataract and sleep in spite of it. In fact, they get so that they cannot sleep without it, like the woman whose husband was a great snorer, and when he was away nights she had to get the hired girl to turn the coffee mill so that she could go to sleep. In like manner, bees kept near a railroad become used to the jar caused by passing trains, and hibernate in spite of it. Whatever disturbs bees in such a way that they do not cluster and cannot hibernate, is unfavorable to their wintering well.

I have already confessed my disappointment at the position taken by the *Bee-Keepers' Review* as vague and indefinite. It is clear that slight disturbance caused by an occasional peep at a colony does not break up the hibernating slumber. It is also evident that a sufficient disturbance to interfere while it lasts with their hibernating does not prevent their settling down again into their normal state of repose. But nobody pretends to say that a continual disturbance of bees such as will prevent their hibernating all winter long, may be practised with impunity. I concur in the statement that whatever is new in the hibernation theory is not true, and whatever is true is not new. The hibernation of bees in cold latitudes is old as the bee race—old as winter. The same may be said of steam, electricity and other facts of natural philosophy. Steam power, as a practical thing, is old as fire and water, but its discovery and utilization are modern. Electricity existed for ages before Franklin caught the lightning on a kite string. Mankind knew there was such a thing as lighting, but its many uses were unknown. So the hibernation of bees is no new thing. Man's knowledge of it, and use of that knowledge are new, so new that many wise men are yet in the dark about it.

I may be mistaken as to the progress this idea

is making. But if it be an illusion, the Dr. has not dispelled it from my mind any more than I have dispelled his theory about legislating in regard to bee territory. The fact that a great bee-keeper like Dr. Miller, and a great professor of natural science like Prof. Cook have not accepted the theory of hibernation only proves that "great men are not always wise," and that "it takes great men to put forth great nonsense." Many theological professors and eminent clergymen have not yet embraced advanced ideas in theology that are true as gospel and old as the everlasting hills. The common sense of common people often gets ahead of distinguished teachers. "Art thou a master in Israel, and knowest not these things?" When Galileo propounded the true theory of the universe, the scientists of the day were against him, and forced him to recant, but even while he did it, convictions of truth found utterance in the memorable words: "It moves yet!" I shall recant when the disproof is forthcoming. That a great professor affirms, now and then, "bees do not hibernate," proves nothing, and whether the "idea" progresses or not, I shall uphold it so long as I believe it to be true.

The Dr. takes me severely to task for saying that hibernation is Prof. Cook's "discarded bantling." Well, such is the fact. I know that the Professor now says, "bees do not hibernate," but he once said they did, and he has never given any reasons for his change of opinion. The Dr. says he "never did think so." Has he forgotten my quotation of a paper by Prof. Cook in which years ago he distinctly stated the hibernation theory? I am away from my library and cannot now quote either date or express words, but the paper is extant in a back number of the *A.B.J.*, and can be referred to as evidence that I am right. I have never sought to make his words mean what "Prof. Cook never meant," and if he declares he never meant hibernation in my sense, why, all right; then I am the father of the hibernation theory, and I am not ashamed of the bantling. I do not wish to be unfair to Prof. Cook, and have none but the kindest feeling toward him, but why does he maintain such a profound silence about the matter? Why does he treat the subject with such persistent contempt? Is it unworthy of discussion? The Dr. should not have to be Prof. Cook's apologist and defender. "He is of age let him speak for himself." He is always heard and read with respect, and by no one more than myself. But his total ignoring of the subject, except to say "bees do not hibernate," and then apologise for dogmatism when gently twitted with it, is all he has vouchsafed to do in refer-