torpid condition in winter quarters, but this is not hibernation in a scientific sense, and the author of that theory may as well accept the fact with complacency. In popular phraseology we may be permitted the license to say that bees "hibernate," but when we come down to the precision of language required by science the word must be dropped as applied to bees. On this question of hibernation I have not a doubt that Prof. Cook is right—in fact he has proved his position—but on the physiological problem I am equally certain he is wrong at any rate as to the authorities.

ALLEN PRINGLE.

Selby, Lennox Co., Ont., March 17, '86.

After all that has been said both pro and con about this matter, surely we will arrive at the correct conclusion sooner or later. By each one advancing his views clearly, and solely with a view of arriving at the facts of the case, irrespective of defeat or victory, many valuable scientific points may be brought out and we, novices, will be enlightened in regard to the various theories in question.

FOR THE CANADIAN BEE JOURNAL.

HEDDON'S NEW HIVE. R. Heddon's new hive—so called—is get-

ting quite a boom, and perhaps deservedly so, but how as yet it can be said to be RATE as a matter of fact, so far superior as claimed to all others, I fail to perceive, as it has yet to pass the ordeal of practical tests before its many claims can be fully substantiated. As yet I have not tested the hive (although Mr. Heddon has kindly presented me with the legal right so to do), so I cannot say a word tor or against. What I propose to do in this article is to say a few words in regard to its claims to patentability. As a lawyer somewhat conversant with patent rights, and as a bee-keeper tolerably well read up in the history of improvements in hives and appliances apicultural, I have examined the claims made to the patent office, and there allowed, but viewing said claims in the light of the "state of the art" as revealed by history, I fail to find anything new or patentable. "Closed end frames" were originated years ago by the late nestor of the art, Mr. M. Quinby; fastening such frames in the hive by compression is an old device. Shallow hives have been praised and condemmed for years, and tiering up of hives and section cases is certainly as old in principle as Root's simplicity hive." Invertible hives have been in use for years, and the patent on such granted to Mr. J. M. Shuck long antedates the Heddon hive. Shuck's hive is formed, too, on precisely the same plan as Heddon's, the differ-

ence being that Heddon used two sets of shallow frames, while Shuck used but one suspended from the middle of its end bars. Reversible frames have been used for years, and the idea of reversing sections in order that they might be more completely filled out was made use of as long ago to my own knowledge as the year 1867. Slatted honey boards with slats breaking joints with the top bars of frames, have been in use for years, and wide frames for sections, both with and without separators, have been both praised and condemned for many years. What is there in this hive then so new and original that a valid patent can be justly granted on its claims? Mr. H. himself admits that he claims nothing new in the various parts which form the hive, not even the wood and paint used in its construction. He does claim in some way for a combination of something in connection with what he calls an improved method of management. I do not say a word against the hive or Mr. H's methods; far from it. I am simply testing his claims by the fire of admitted facts, and in the crucible of past history. If these claims will stand the test, I am giving Mr. H. a fine advertisement gratuitously; if they will not, I am simply showing that fact, and Mr. H. himself can find no fault therewith, for he most certainly does not wish to stand on untenable ground, or succeed in putting his hive on the market by false pretenses. I trust that no one will be mean enough to make use of Mr. H's combinaious to Mr. H's detriment whether a valid patent has been granted or not, for whatever there is in the hive that is Mr. H's original idea should be held to belong as sacredly to him, as should his pocket book, or any other property. I am simply criticising, or rather inquiring into the facts connected with a public matter, and only with a desire of eliciting the truth. As a patent solicitor I am always ready to admit the just claims of any to originality, and aid in securing the same by invoking the aid of the patent office; but I have yet to learn that a valid patent can be granted for a combination of old ideas in an old form tor the purpose of producing an old result.

J. E. POND, JR

Foxboro, Mass., Feb. 6, 1886.

Since receiving friend Pond's letter relative to the patentability of the Hedden hive, we have given the Canadian patent laws a a most careful study, and we are thoroughly satisfied that in Canada the patent is unquestionably secure, and our opinion has been verified by a leading firm of patent solicitors in Toronto, and probably the best firm in Canada, There may be something in the U. S. patents received heretofore by