

ascends the bees can of course more readily move upward towards their stores in cold quarters than laterally. The reason that the deep frame is much better for cold winter quarters thus becomes obvious. On the same principle of the natural ascension of heat the other fact may be explained, viz., that the stores are better capped in the deep than the shallow frame, as the winter stores are usually put in during the fall in weather more or less cool, and the heat of the deep hive is more concentrated than that of the shallow hive, which is more diffused and consequently less effective for the curing and capping processes.

With this much as to the relative merits of the two styles of frame for wintering, it is now in order to compare their relative merits for spring and summer purposes. To bring bees successfully through the precarious season of spring the deep frame is undoubtedly the better one, for two reasons. The first is, the brood in the deep-frame hive will be more compact and less distributed than in the shallow-frame, and this is an important point. The second reason is, the heat is better preserved and economized and more concentrated on the brood-nest than in the shallow frame, and this also is an essential point during the cold spring weather. But for summer purposes—for the harvesting of honey—the claims of the two frames are I think about evenly balanced. If there is any difference I should feel disposed to give it to the shallow-frame. Of course those apiarists who contend that comb honey of the first quality cannot be successfully produced in the lower story or brood-chamber of the deep-frame hive will join issue with me in only conceding a trifling advantage to the shallow frame for general harvesting purposes. In reply to this I may say I have produced just as nice section honey in the body of a deep frame hive (the Jones) as I ever produced or saw produced on top of any shallow-frame hive. Still, taking convenience of manipulation into consideration as well as the quantity of ingathering both of comb and extracted honey, the shallow-frame hive is perhaps slightly the better one of the two for all summer purposes.

I would sum up the relative merits of the two frames thus: In warm climates as in the Southern and some of the Central States where there is no trouble with cold in wintering, the shallow frame is no doubt the better one for all seasons of the year. Hence it is not at all surprising that the Langstroth frame is more popular "down south" than any deep frame. On the contrary in more northern localities—in Canada and the Northern States—the deep

frame is without doubt (that is, to my mind) the better one on the whole of the two. There certainly is a great variety of hives and frames used in Canada; and to undertake to say which one is most popular or most used would perhaps be only guess-work. However, judging from the area of my own personal knowledge I should think that the deep frame predominates considerably, as, in my judgment, it *ought to do* in this climate. My advice to all beginners in bee-keeping and to the comparatively inexperienced, is to use the deep frame and continue it until you get so well grounded in the Art of Bee-Culture that you can bring your bees through the Canadian winter and spring with reasonable certainty in any style of hive or frame. Not until then will you be safe in adopting the shallow frame.

Regretting my inability to be present; hoping the Leeds Convention may be highly successful, and profitable to you all; and wishing you all the compliments and congratulations of a New Year I beg to subscribe myself.

Yours fraternally,

ALLEN PRINGLE.

Selby, Lennox Co., Jany. 6th, '86.

P. S.—I beg to add a word for our CANADIAN BEE JOURNAL which ought to and no doubt soon will get the support of every Canadian Bee-Keeper whether he keeps one colony or five hundred.

A. P.

FOR THE CANADIAN BEE JOURNAL.

APICULTURAL PATENTS.

UNTIL the past two or three years apicultural patents have been discouraged. Let an apicultural inventor attempt to protect the fruits of his labor, and soon a "pack" [were after him in full bay; and in some instances he became so "worried" as to give his inventions to the people, rejoicing that he had been enabled to contribute his mite to the common good. Public opinion had been educated up to that point, that it would almost condemn an article simply because it was patented.

A change is coming—is now here. We are beginning to respect apicultural invention, to recognize it even if it isn't patented, and to allow (?) apicultural inventors to patent their inventions if they wish.

We presume that the reason why patents have been opposed in the manner they have is because of the "humbaggery" that has pervaded them; but it should not be forgotten that "humbaggery" prevails in all business avenues, but business is not only a blessing but a necessity to human life.