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until this vital question has been satisfactorily settled. It is well for us that we should occasionally get out of the ruts of general routine, and ask ourselves if we are doing the best work that can be done.

In *Gleanings* of May 15th last, Ed. Root says "while this winter may have proved a severe one on bees, the size or shape of the frame will have nothing to do with it." We shall see presently how far from the truth this strange suggestion really is.

Ed. Root had assured me the U. S. losses were not above 5 per cent; but the reports published in *Gleanings* show very serious losses indeed. Notwithstanding non-protection, poor food, etc., I am prepared to say many of these losses would have been avoided had a properly constructed frame been adopted.

On the shallow Langstroth, especially with its close spacing and too thin combs, the colony does not carry enough store above the cluster, so that non-protected colonies in particular die from starvation before the owner realizes the critical state of his bees. The same non-protected stocks on deeper, shorter, thicker combs stand 100 per cent better chance of safety.

Neither friend Root's 5 per cent., nor the 30 to 55 per cent. losses actually reported in *Gleanings* will stop at that. The spring losses following bad wintering must always be counted in; Ed. Root's modest 5 per cent average must be reckoned as 15 per cent, while the late 30 to 75 per cent may possibly have run up to 50 to 90 per cent. These big losses could have been greatly reduced by deeper, wider-spaced frames, the initial extra cost being a mere trifle compared with the loss of profit, without counting the wiping out process.

Attempts have been made to show that the L. frame measures about the same in square inches as my 16x10 frame, and therefore must be quite as good. I have before me one of my 16"x10" frames,

and the L. of Root—Hoffman type so largely used. For comb space we must take the inside measurements, and thickness as regards spacing.

The L—H frame measuring 17"x8" inside gives 136 square inches. The other being 15¼"x9" gives 137¼ square inches, but to this latter, being spaced at least ⅛" wider (in my apiary ¼" wider when feeding up for winter) we must add some 8 cubic inches of store all above the cluster, and by the wider spacing (as I advise) double that amount of extra storage. Consequently the deeper frame with heavier stores above the cluster has the better chance of safe wintering. But there is no reason why a new Standard frame should stop at 10" in depth, if it is to meet the requirements of a cold climate in wintering; or the needs of a prolific queen in the early summer; or on the other hand where the peculiar conditions of the tropics, or semi-tropical climates prove that the L. frame is of little practical value.

I have been too busy to continue this subject; but the many losses reported in *Gleanings* of April 1st, since my earlier articles on this subject, go very far to show the necessity of adopting a more suitable frame for general use. Many of those who have had such heavy failures will probably begin to rub the scales from their eyes, and look straight ahead towards the daylight let in through a deeper frame.

Heathfield, Sussex, Eng., Sept. 5, 1912.

Assistant Editor: "Here's a farmer writes to us asking how to treat sick bees."

Editor: "Tell him he'd better treat them with respect."

A genius is usually successful in making almost anything but a living.

It is always safest to keep to yourself the uncomplimentary things you think of other people.