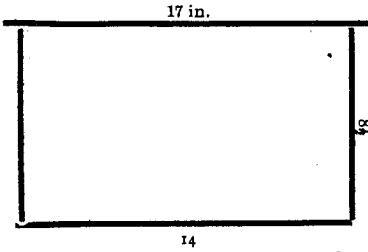


This is the frame in common use amongst British bee-keepers, but I hope to say more about the "Standard" frame on a future occasion.



The "Cowan" hive is made to take from ten to thirteen frames, but ten is the usual number. The inner walls are one inch thick, the outer case is five-eighths of an inch thick, and the space between the two is filled with cork dust as a non-conductor.

Fig. 2 shows the hive as arranged for wintering. The ten frames are reduced to six, and the space is contracted by the division-boards P.

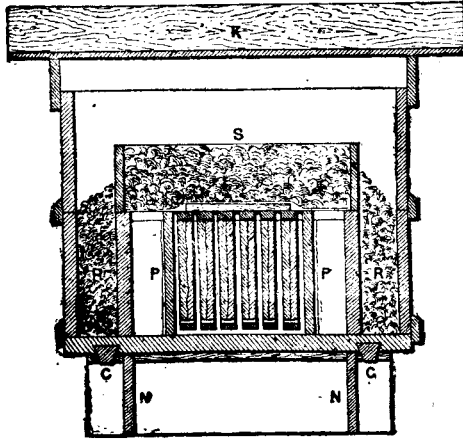


FIG. 2.—SECTION OF COWAN HIVE. WINTER PACKED.

Strips of wood are placed on the tops of the frames to allow the bees to pass over the combs; on this is first laid a piece of calico, and chaff cushions over all.

Mr. Cowan is very successful in working this hive for extracted honey, but he has told us his methods so ably in his pamphlet *Doubling and Storifying*, that the better plan will be to reproduce them here.

Doubling consists in selecting two strong stocks and removing from one of them all the combs, shaking and brushing the bees back into the hive. These combs, full of brood, are placed into an empty hive on to the top of the other stock and form a second storey. The lower hive being crowded with bees and the weather warm they immediately ascend and take care of the brood.

Quantities of this will be hatching out daily

and increasing the population, whilst every cell, as it is vacated, will be filled with honey, which as soon as capped can be extracted. Although we were amongst the first to use and advocate excluder zinc when working large supers, we have long since discontinued to employ it, as we found that it interfered with the work of the bees, and that we always got much more honey without its use than with it.

We do not mind the queen ascending even to lay, and we have not, for extracted honey, got to consider the appearance of the combs, as those which have been bred in are even better and stronger for use with the extractor than new combs which are more liable to break.

#### STORIFYING.

Another plan, and which gives us still better results, is that of storifying, and consists of piling three or four hives one upon the top of the other, only one set of brood combs being used to start with.

In working three or four storeys we proceed at first as already described before we double our hives, and when the stock hive is crowded with bees and brood we place on it a similar hive full of empty combs, the frames being placed one and a quarter inches from centre to centre. It may be thought that this is giving the bees too much space at one time, but if the weather be warm and there are plenty of bees, we shall not find it any too much. Still, should the weather be cold, we need not give them all the combs at once, but only five or six, closing the space with a division-board, and pushing down a quilt on to the tops of the frames in the lower hive. In this way the capacity can be adjusted to the requirements of the colony, and as the bees want more room, the division-board can be removed and more empty combs given. A frame of brood taken from the lower hive and placed in second