

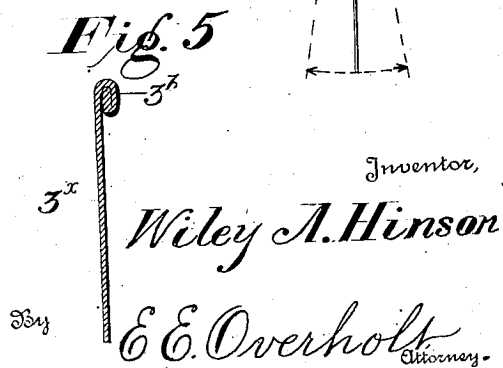
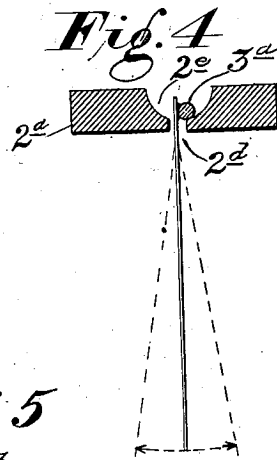
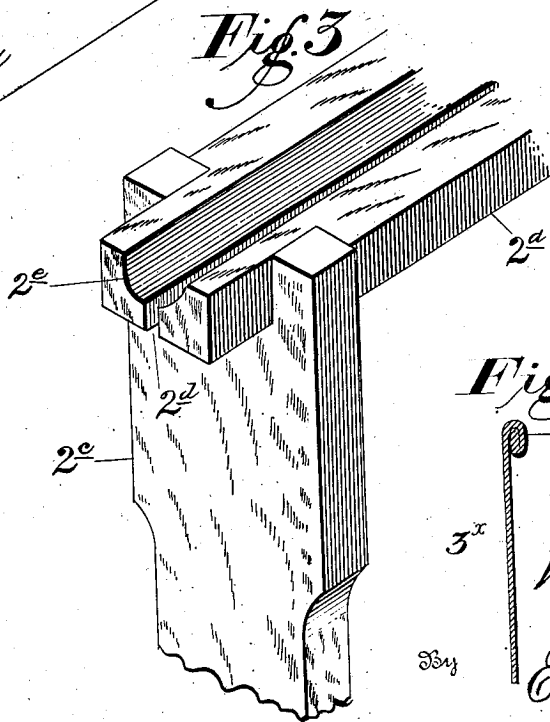
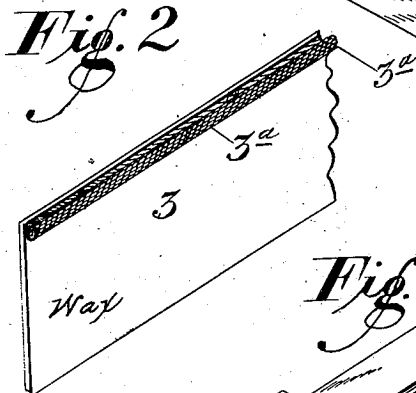
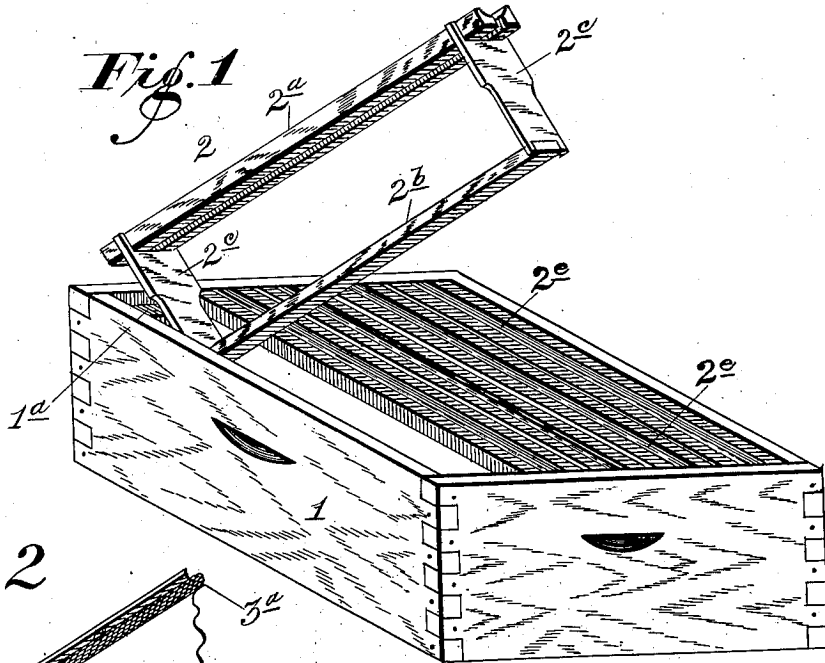
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MEANS FOR SUPPORTING COMB-FOUNDATIONS IN HONEY FRAMES

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MEANS FOR SUPPORTING COMB FOUNDATIONS IN HONEY FRAMES

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2 Claims. (Cl. 6—10)

My invention relates to means for supporting the comb-foundations in the frames of the supers which form bee hives.

My object is to form a frame and foundation so constructed and arranged relatively to each other that both frame and foundation will normally be held in the super in the same vertical plane; and so that if the foundation is accidentally moved out of said vertical relation to the frame, it will automatically tend to return there-
to.

Another object is to effect the arrangement just referred to, by means that will be simple and inexpensive in construction, and easily and economically operated.

A leading feature of the invention resides in the upper bar of a frame, said frame having a vertical slot with the foundation passing loosely downward therethrough and depending therefrom, the upper edge of the foundation being provided with means for rendering it thicker than the width of the slot, whereby said thickened upper edge constitutes a stop for limiting the downward movement of the foundation in said slot; said upper bar being also provided at the upper side of said slot with a dado of sufficient width and depth to fully receive thereinto the thickened edge of the foundation, below the level of the top of the bar.

The invention consists in certain novel features of construction and arrangement of parts, as will be hereinafter described and claimed, reference being had to the accompanying drawing in which—

Fig. 1 is a perspective view of a super carrying a number of honey frames, one of which is lifted out of its normal position in the super, in order to disclose its general construction.

Fig. 2 is a broken perspective of one form of comb foundation which I employ.

Fig. 3 is a broken perspective, on an enlarged scale, of one end of the top bar of a honey frame and its adjoining post.

Fig. 4 is a transverse section on an enlarged scale, of the upper bar of the frame; and

Fig. 5 is a sectional view, on an enlarged scale of a foundation provided with a modified form of top edge.

The numeral 1 indicates a super, any suitable number of which may be used to build up a hive, one being placed immediately above another. The numeral 2 indicates the frames which are carried by the super, while 3 indicates the foundations carried by the respective frames in the supers.

The frames are all similar to each other, each comprising a top bar 2a, a bottom bar 2b, and end posts 2c, whereby when the frames are placed in operative position in the super, the projecting ends of the top bar 2a rest upon suitable supporting ledges 1a located near the top of the super on opposite sides thereof.

The top bar 2a of the frame has a longitudinal slot 2d for the reception of the artificial foundation 3, which has at its upper edge means which provides a stop for the downward movement of the foundation 3 in said slot.

In Fig. 2 of the drawing I have shown the foundation 3 provided near its top edge with a jute cord, which in the manufacture of the foundation is rigidly connected therewith, and this cord is of such thickness that the upper edge of the foundation cannot pass on downwardly through the slot 2d of the top bar.

In the manufacture of this form of the foundation, the cord 3a is preferably thoroughly saturated with the wax with which the foundation is usually formed, so that from a practical point of view, it forms an integral part of the foundation.

Fig. 4 of the drawing shows this cord in its operative relation to the foundation 3 and the slot 2d of the frame.

In Fig. 5 of the drawing I have shown a slightly modified form of means at the upper edge of the foundation for cooperation with the slot 2d, to hold the foundation suspended therefrom. In this modified form the upper edge of the foundation 3x is bent upon itself as indicated at 3b, till said upper edge is too thick to pass downwardly through the slot 2d. Attention is also called to the fact that the upper bar 2a of the frame is dadoed at the upper side of the slot 2d, as indicated at 2e in the drawing. The object of this dado 2e is to form a recess in the bar 2a deep enough to completely receive the upper thickened edge of the foundation below the plane of the top of the bar 2a of the frame, whereby the upper edge of the foundation will not be touched by the bottom of another super in cases where one super is placed on top of another as the hive is built up to any desired height.

The old processes of rolling foundation on the frame, or of dropping hot wax into the slot in the frame to keep the foundation from dropping out, are slow and tedious processes as compared with the method I have here disclosed; and for other reasons well known to bee keepers, they are often quite unsatisfactory; as, for instance, the supers, upon receiving rough treatment or

careless handling when placed on the hive, may be left at an angle, which in turn, will leave all the frames in that super inclined at the same angle. This leaves the foundations free to be bent by gravity; and if they are put to use immediately will cause the bees to build the comb in exactly the same position in which the foundations are hanging. Also, from rough treatment, such as frequently happens in shipping by freight, or in hauling from one apiary to another, the wax that was poured to set the foundation, may jar or work loose (which is a very common occurrence), and will, in that condition, be put on a hive unnoticed by the bee-keeper. The bees will, of course, build the comb on the foundations in exactly the position in which the foundations are hanging, thus resulting in crooked combs which it will be impossible to lift from the supers without breaking the comb, and thereby occasioning loss of honey as well as the production of a less salable product, since in the production of first class comb honey, both the super and the foundation must be kept in the proper relative position to each other. If the foundation is in the right position and the super is in the wrong position, the product will be discounted thereby; and if the foundation is in the wrong position, and the super is in the right position, the result will be equally faulty.

With my arrangement, when through rough or careless handling, the super is left at an improper angle on the hive, and is then, later righted to its proper vertical position thereon, the foundation is free to roll in the dadoed slot and swing into a vertical position, and thereby automatically right itself relatively to the correct position now assumed by the super.

Thus, it will be seen that with my arrangement, all that the keeper has to do is to see that the super is kept right, and the foundation will automatically take care of itself, hence special attention is called to the dado feature of the combination which is intended to permit the foundation to have perfect freedom to swing 45

to its true vertical position in the super, when by rough or careless handling it has been shaken or jarred out of said position to either right or left, as indicated by dotted lines in Fig. 4.

5 My improved foundation is a great time-saver for bee-keepers, since the foundations simply have to be dropped into the dadoed slots in the frame; and that can be done with comparative rapidity, as experience has amply proved.

10 From the foregoing it will be seen that I have provided a simple and inexpensive arrangement, not only as a time-saver, but also as an effective means of insuring the production of honey for the market, in the most appealing form.

15 What I claim as new, and desire to protect by Letters Patent is;—

1. In a device of the character described, the combination with the upper bar of a super frame, said bar having a narrow longitudinal slot therein, of an artificial foundation for honeycomb, said foundation being of a thickness to be easily received into said slot to pass downwardly therein, and having near its upper edge and substantially parallel therewith, a flexible cord rigidly secured thereto, said cord being of a diameter 25 too great to permit its passage through said slot, whereby the foundation depends from the upper bar of the frame in a substantially vertical position.

2. In a device of the character described, the combination with the upper bar of a super frame, said bar having a narrow longitudinal slot therein, of an artificial foundation for honeycomb, said foundation being of a thickness to be easily received into said slot to pass downwardly 30 therein, and having near its upper edge and substantially parallel therewith, a flexible cord rigidly secured thereto, said cord being of a diameter too great to permit the passage of the upper part of the foundation through slot, said bar being recessed on its upper side along said slot 35 sufficiently for the recess to receive therein the upper edge of the foundation including said rigidly attached flexible cord.

WILEY A. HINSON.