

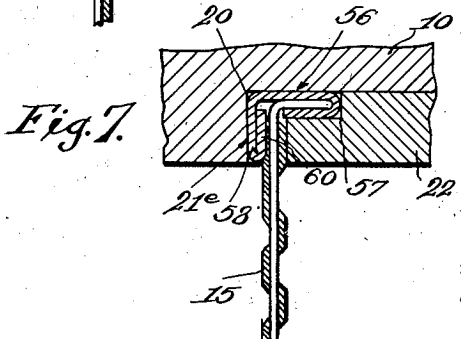
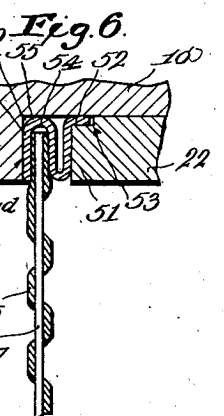
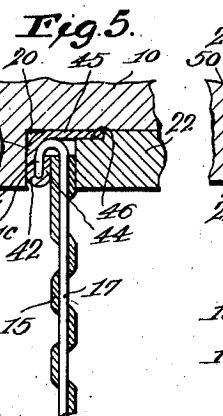
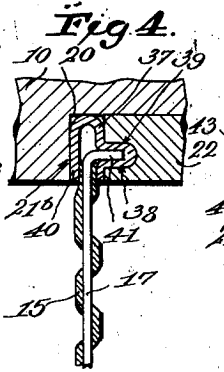
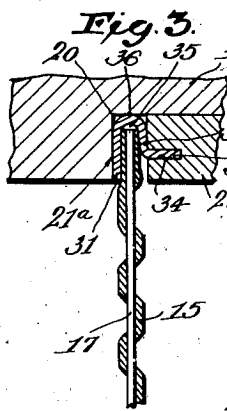
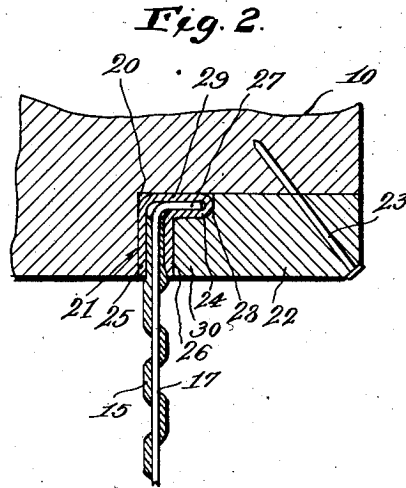
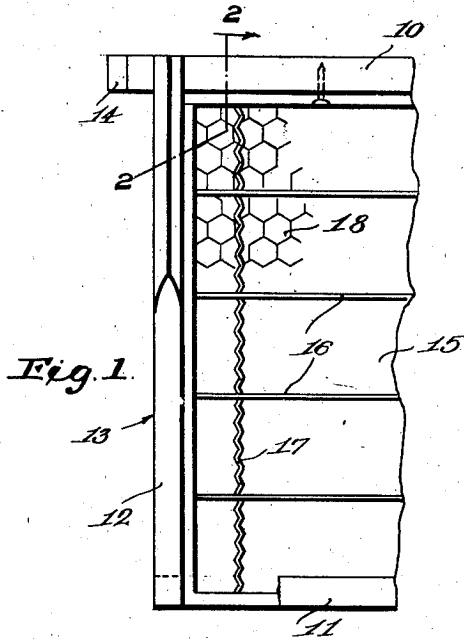
March 16, 1943.

H. C. DADANT ET AL

2,313,735

BEE COMB FOUNDATION

Filed Oct. 9, 1941



Inventors
Henry C. Dadant
Roy A. Grout.
By
Munn, Liddy, Gleason & Rane
Attorneys

UNITED STATES PATENT OFFICE

2,313,735

BEE COMB FOUNDATION

Henry C. Dadant and Roy A. Grout,
Hamilton, Ill.

Application October 9, 1941, Serial No. 414,340

5 Claims. (Cl. 6—10)

This invention relates to improvements in bee comb foundations and is more particularly directed to the type described and claimed in our copending application Serial No. 316,424, filed Jan. 30, 1940, of which the present application is a continuation in part.

An object of the invention is the provision of an anchoring means for the wax sheets in frames of bee comb foundations in which the anchoring means engages around one edge of the wax sheet and is provided with a projection adapted to be received within a slot formed in the usual securing strip employed in connection with a rabbeted section of one or more bars of the frame.

This invention will be best understood from a consideration of the following detailed description, in view of the accompanying drawing forming a part of the specification; nevertheless, it is to be understood that the invention is not confined to the disclosure, being susceptible of such changes and modifications as define no material departure from the salient features of the invention as expressed in the appended claims.

In the drawing:

Figure 1 is a fragmentary view in elevation of the bee comb foundation constructed according to the principles of our invention.

Figure 2 is a vertical section taken along the line 2—2 of Fig. 1.

Figure 3 is a similar section showing a modified form of the anchoring means for a wax sheet.

Figures 4 to 7 inclusive are vertical sections similar to that shown in Figs. 2 and 3 in which further modified forms of the anchoring means are disclosed.

Referring more particularly to the drawing, 10 designates an upper bar and 11 a lower bar which are connected together by side bars 12, one of which only is shown, and which constitute a frame 13 in which a wax sheet 15 is mounted. The frame 13 is ordinarily suspended by means of jugs 14 which project from the opposite edges and which project beyond the side bars 13 from the opposite ends of the top bar 10.

Longitudinal wires 16 which may be straight or corrugated are embedded in the sheet 15 as are transverse wires 17 which may be corrugated or the wires may be straight as shown at 16. The corrugations of the wire follow the contour of the synthetic cells 18 formed in the sheet 15 in a well known manner.

The upper bar 10 is rabbeted as shown at 20 to receive a U-shaped member 21 and securing strip 22, which is held in place by diagonally disposed nails 23.

The U-shaped member 21 has a bight portion 24 which is turned at approximately a right angle to the side flanges 25 and 26, which are located in parallel relation and pinched on one edge of the wax sheet 15 and in embracing relation with the projecting ends 27 of the wire 17. Thus since the ends of the wire 17 extend into the bent portion of the U-shaped member 21 the ends of the wire are likewise bent in the same direction.

The connecting strip 22 is provided with a groove 28 to receive the bent portion of the U-shaped member 21. Thus when the nails 23 are driven into place the inner edge of the strip 22 will be forced not only against the flange 26 but the walls of the groove 28 will also be forced against the bent bight portion 24 of the U-shaped member. In this particular form the bent portion 29 of the U-shaped member or anchoring bar 21 is held in place by the projecting portion 30 of the connecting strip 22.

It will be appreciated that while only one wire 17 is shown in Fig. 1, nevertheless a number of these wires are located in spaced relation within the sheet 15 and all the ends of these wires along one edge extend beyond the edge of the sheet 15 and are bent at a right angle as shown at 27 in Fig. 2.

In Fig. 3 is shown a modified form of the anchoring bar 21a. In this case one flange 31 is in engagement with one wall of the rabbeted portion 20 of the bar 10, while the other flange 32 is provided with an offset 33 which is received within the slot 34 formed in the attaching strip 22. Each of the ends of the wires 17 where they are received within the anchoring bar 21a is provided with a head 35 which is received within the bight portion 36 of the U-shaped member 21a.

The flanges 31 and 32 are pinched upon the edge of the sheet 15 and when the attaching strip 22 is in position and the flange 33 is within the slot 34, the edge of the sheet which is connected to the anchoring bar 21 is securely fixed in position within the bar 10.

In Fig. 4 is shown a further modified form in which one flange 31 of the anchoring bar 21b is provided with an offset portion 33 which is U-shaped in formation and received within a groove 39 formed in the attaching strip 22. The other flange 40 of the anchoring bar is straight and in flat contact with the wall of the rabbeted section 20 of the bar 10.

Each of the wires 17 which are embedded in the wax sheet 15 has an end 41 turned at right angles and received within the U-shaped member 38. Thus it will be seen that when the attaching

strip is nailed into place as shown in Fig. 2, the anchoring bar and likewise the connected edge of the sheet 15, are securely fixed in place within the bar 10.

In Fig. 5 is shown a further modified form of an anchoring bar designated by the numeral 21c. In this case the U-shaped member shown at 42 has one flange 43 in engagement with one wall of the rabbeted section 20, while the other flange 44 is in engagement with one face of the sheet 15.

The free edge of the flange 43 is turned at a right angle as shown at 45 and this flange is sufficiently long to extend within a slot 46 formed within the inner portion of the attaching strip 22.

The wires 17 are turned upon themselves at the ends as shown at 47 so that they will be neatly received between the flanges 42 and 44 by the U-shaped member 21c. In other words, the wires are bent into hook formation and are confined within the U-shaped member 21c so that when the attaching strip 22 is secured in place by nails as shown in Fig. 2, the connected edge of the sheet 15 is securely fixed in place.

In Fig. 6 a further modified form of the anchoring bar is shown at 21d. In this case the U-shaped member 50 has one flange extended as shown at 51 and then projected at a right angle as shown at 52 to be received within a groove 53 of the attaching strip 22.

In this form the wires 17 are provided with heads 54 which are received within the bight portion 55 of the U-shaped member 50, while the flanges of the U-shaped member are compressed against the opposite faces of the wax sheet 15.

When the attaching strip 22 is secured in place by means of nails, as has been previously described, the inner face of the attaching strip will be forced against the flange 51, likewise forcing the outer flange of the U-shaped member against a wall of the rabbeted portion 20 of the bar 10. It will be seen from this construction that the anchoring bar 21d will securely hold the connected edge of the sheet within the bar 10.

Fig. 7 shows a further modified form of the anchoring bar designated by the numeral 21e. In this case the U-shaped member 56 is located within a groove 57 of the attaching strip 22 and the wires 17 of the wax sheet 15 are bent at right angles and are received within the U-shaped member 56 where these wires extend beyond the edge of said sheet.

A flange 58 which forms an extension of the U-shaped member 56 is bent upon itself as shown at 60, and this bent portion is in engagement with one face of the wax sheet 15 while the flange engages a wall of the rabbeted section 20 of the bar 10.

The inner wall or face of the attaching strip 22 is in engagement with the other face of the wax sheet. Thus it will be seen by this construction that the anchoring bar 21e is securely fixed to the wax sheet and also securely affixes the inner edge of the sheet within the bar 10 after the nails shown in Fig. 2 are driven diagonally through the attaching strip 22.

While the top and bottom edges of the wax sheet are shown as secured in the frame 14 along two edges only, nevertheless all four edges of the

sheet may be secured within the adjacent bars of the frame.

The grooves shown in the attaching bars 22 of the various figures may be formed in the bars 10 of said figures instead of the bars 22 with the same results.

We claim:

1. In a honey comb foundation including a frame in which a wax sheet is mounted, said frame having a top bar provided with a rabbeted portion, the wax sheet having a wire embedded therein, said wire provided with a lateral offset at one end constituting holding means, an anchoring bar clamped around one edge of the sheet and provided with an offset portion receiving the offset portion of the wire, and an attaching strip having a slot to receive the offset portion of the anchoring bar.

2. In a honey comb foundation including a frame in which a wax sheet is mounted, one of the bars of the frame provided with a rabbeted portion, the wax sheet having a wire embedded therein, an anchoring bar being U-shaped in cross section and clamped around one edge of the sheet and one end of the wire, one of the flanges being provided with a lateral offset portion, and an attaching strip having an elongated slot to receive the offset portion of the anchoring bar.

3. In a honey comb foundation including a frame in which a wax sheet is mounted, one of the bars of the frame provided with a rabbeted portion, the wax sheet having a wire embedded therein, an anchoring bar being U-shaped in cross section and clamped around one edge of the sheet and an end of the wire, said anchoring bar adjacent the bight portion being bent at an angle to form an elongated lateral offset portion, and an attaching strip having an elongated slot to receive the offset portion of the anchoring bar.

4. In a honey comb foundation including a frame in which a wax sheet is mounted, one of the bars of the frame provided with a rabbeted portion, the wax sheet having a wire embedded therein, an anchoring bar being U-shaped in cross section and clamped around one edge of the sheet and an end of the wire, said anchoring bar adjacent the bight portion being bent at an angle to form an elongated lateral offset portion, said end of the wire extending into the lateral offset, and an attaching strip having an elongated slot to receive the offset portion of the anchoring bar.

5. In a honey comb foundation including a frame in which a wax sheet is mounted, said frame having a top bar provided with a groove, the wax sheet having a wire embedded therein with one end of the wire projecting beyond one edge of the sheet, an anchoring bar clamped around said edge of the sheet and the projecting end of the wire and adapted to be located in the groove, and an attaching strip also located in the groove and provided with a slot, said anchoring bar having a lateral offset received by the slot.

ROY A. GROUT,
HENRY C. DADANT,