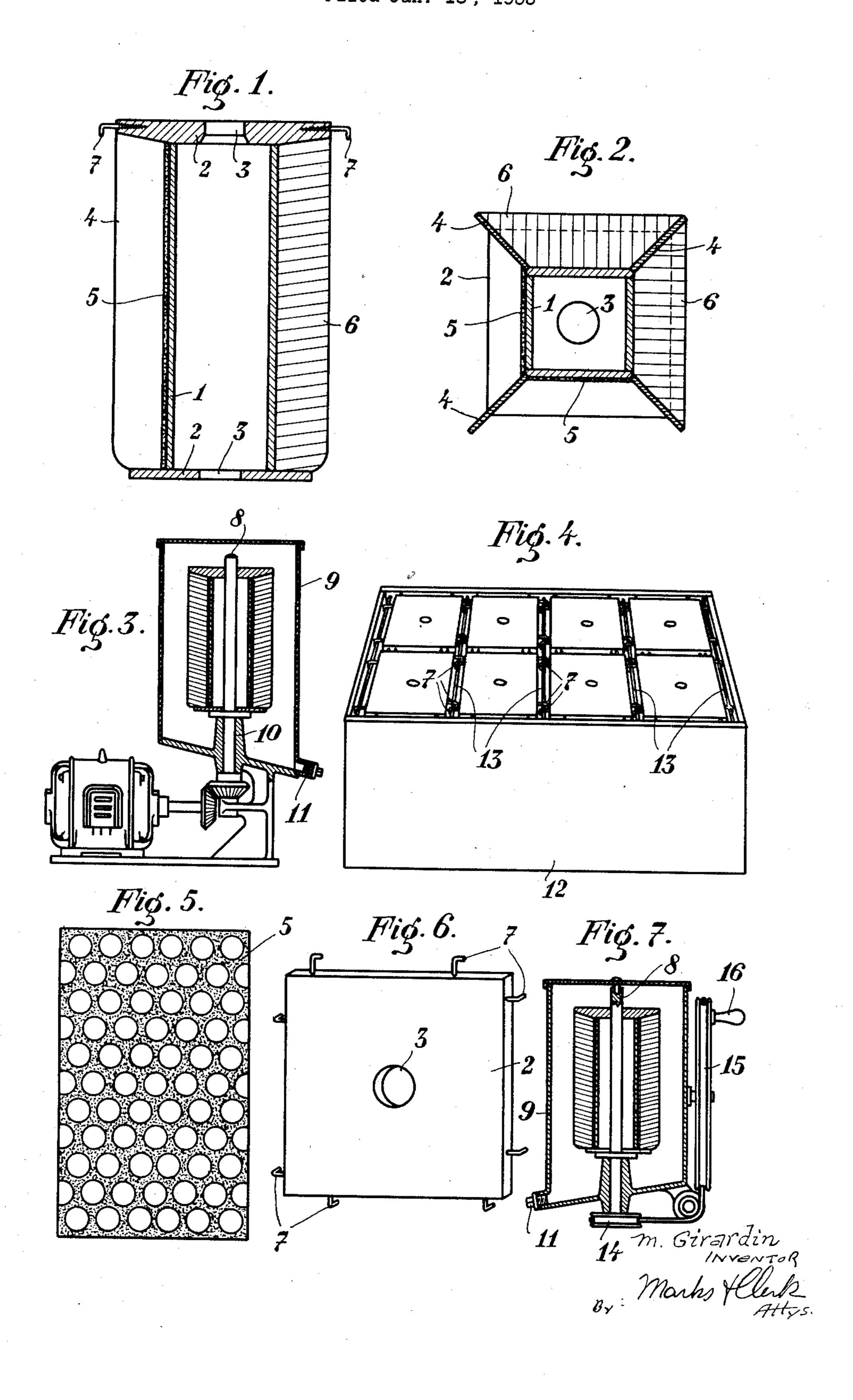
M. GIRARDIN

FRAMING FOR BEEHIVES
Filed Jan. 18, 1933



## UNITED STATES PATENT OFFICE

1,962,066

## FRAMING FOR BEEHIVES

Marcel Girardin, Neuchatel, Switzerland

Application January 18, 1933, Serial No. 652,393 In Switzerland January 23, 1932

4 Claims. (Cl. 6—1)

The present invention relates to a framing for bee-hives and especially of a kind which facilitates and simplifies the winning of the honey from hives having breeding places made of such framings.

Heretofore in hives of this kind framings were used which occupied the whole width of the hive and which when it was desired to extract the honey by centrifugal force, were put upon a rotating frame inside of a container. Since the size of the framing settled also the diameter of the extracting vessel this latter became very encumbrous and costly and was therefore not within the reach of the means of an amateur possessing only a few hives.

Now as the winning of the honey by centrifugal force is the best known method, wherefore the present invention maintains this method but without certain disadvantages.

and is formed of a vertical prismatic core provided at its corners with radiating partition walls the whole being held together between a top and bottom plate. Whatever be the number of sides of the prism there always exists, by placing such a framing within a receptacle of relatively small dimensions, the possibility of extracting the honey without spending much

Preferably a square shape is given to the framing, a prismatic core with radiating partition walls at the corners. But of course instead of quadrilateral prisms also hexagonal prisms could be used, made of boards nailed together and left hollow, or if solid, be made of one solid piece of wood with grooves at the corners into which the radiating partition walls could be inserted.

In the drawing one working form of the framing is represented as an example.

Fig. 1 is a vertical section and Fig. 2 a cross section.

money for expensive machinery.

Fig. 3 shows diagrammatically a view of a framing put into an extracting apparatus and

Fig. 4 a hive made of framings according to 45 the present invention.

Figs. 5 and 6 are details and Fig. 7 a view of a small extracting apparatus driven by hand.

According to Figs. 1 and 2 a square prismatic core 1 made of four boards held together by 50 square top and bottoms boards 2 each provided with a central hole 3. Four boards 4 radiating from the four corners of the core enclose four work fields to be used by the bees for the building up of their combs or nests.

The outer surfaces of the prism are coated with

a layer of wax about ½" thick and circular or hexagonal impressions (see Fig. 5) are made on this coating to form a lure for the building of the cells 6. The four edges of the top board 2 carry each two hooks 7 (Figure 6) whereby the 60 framings may be hung up at a given distance from each other on supporting wires 13 to form a hive or super 12 as shown in the Fig. 4.

Fig. 3 represents a device for extracting the honey from the framings made according to the 65 present invention. Holes 3 provided in the top and bottom boards 2 will allow the framings to be mounted on a rotatable spindle 8 inside of a receptacle 9. The inclined bottom of this receptacle carrying the bearing 10 for the spindle 70 will direct the collected honey towards an outlet

The device according to Fig. 7 comprises a receptacle 9, a rotatable spindle 8 for the framing To this end the framing is made very small driven by means of a crank 16 fixed to a fly  $^{75}$ wheel 15 and a belt or cord transmitting the speed of the periphery of the fly wheel to a small pulley 14 fast to the spindle 8.

With the device of Fig. 7 the honey carried by a framing according to the present invention 80 can easily be extracted without any danger of deteriorating the combs. The device can be rotated by hand at a speed not very far off from the speed of small motors and is not much larger than an ordinary kitchen utensil.

What I claim as new is:

1. Framing for bee-hives comprising a vertical prismatic core, radiating partition walls provided at the corners of said core and top and bottom boards enclosing the core and partition 90 walls to form hollows for the bees to build the

combs. 2. Framing for bee-hives comprising a vertical prismatic core made of boards, radiating partition walls held in grooves at the corners of the  $^{95}$ core and top and bottom boards enclosing the core and partition walls and provided with central holes to fit a rotatable axis and a wax coating provided on the faces of the prismatic core.

3. Framing for bee-hives comprising a vertical prismatic core made of boards, radiating partition walls held in grooves at the corners of the core, top and bottom boards enclosing the core and partition walls and provided with cen- 105 tral holes to fit a rotatable axis, suspension hooks fixed to the side edges of the top board and a wax coating provided on the side faces of the prismatic core.

4. Bee-hive or super comprising framings each 110

formed with a vertical prismatic core, radiating the prismatic core, an open box to receive the partition walls held in grooves at the corners framings suspended therein, and wires stretched of the core, top and bottom boards enclosing across the opening of the box as carriers for the core and partition walls and provided with the suspended framings. 5 central holes to fit a rotatable axis, suspension hooks fixed to the side edges of the top boards

80

|            | a wax coating provided on | the side faces of | MARCEL GIRARDIN. |
|------------|---------------------------|-------------------|------------------|
| 10         |                           |                   | 85               |
| <b>l</b> 5 |                           |                   | 90               |
| 20         |                           |                   | 95               |
| 25         |                           | •                 | 100              |
| 0          |                           |                   | 105              |
| 5          |                           |                   | 110              |
| 0          |                           |                   | 115              |
| 5          |                           |                   | 120              |
| )          |                           |                   | 125              |
| í          |                           |                   | 130              |
| ļ          |                           |                   | 135              |
|            |                           |                   |                  |

145

150