

(No Model.)

J. R. HAWKINS.
CENTRIFUGAL HONEY EXTRACTOR.

No. 501,717.

Patented July 18, 1893.

Fig 1.

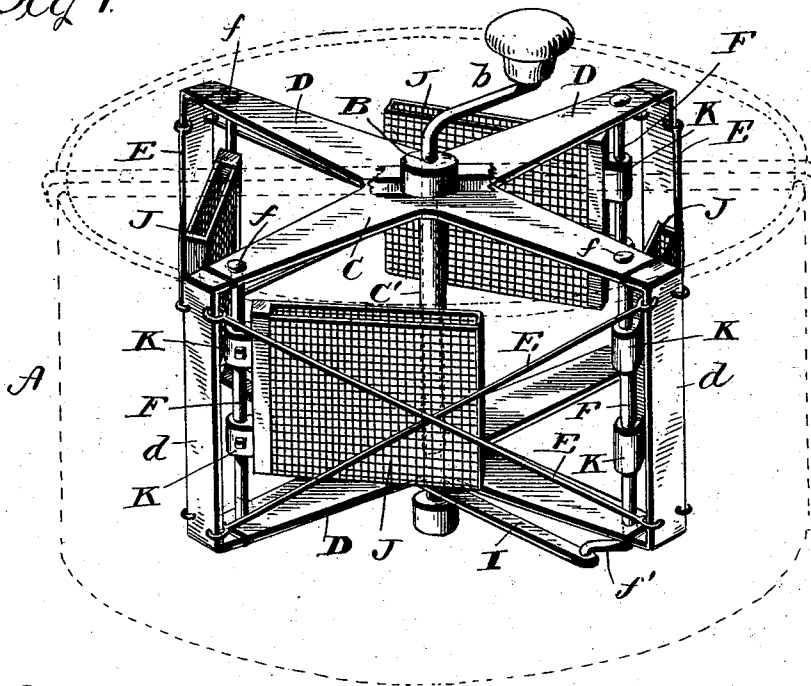


Fig. 3.

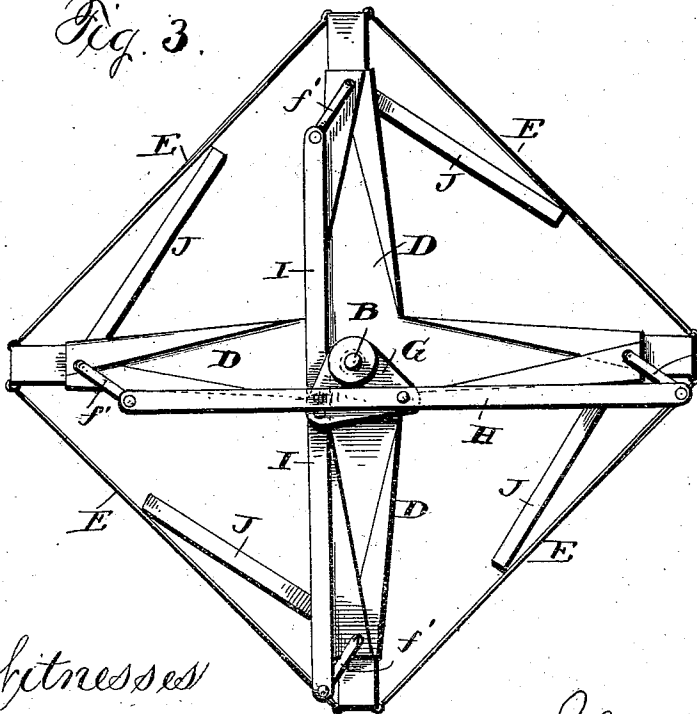
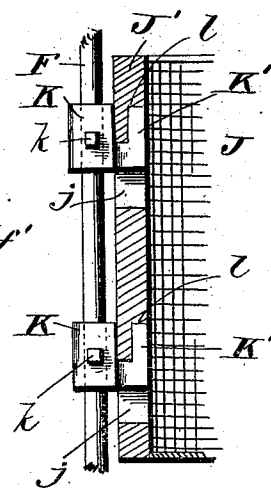


Fig. 2



Witnesses
G. Williamson
C. S. Trull.

Inventor
James R. Hawkins,
By Franklin N. Hough
att'y

UNITED STATES PATENT OFFICE.

JAMES RICHARD HAWKINS, OF BENJAMIN, UTAH TERRITORY.

CENTRIFUGAL HONEY-EXTRACTOR.

SPECIFICATION forming part of Letters Patent No. 501,717, dated July 18, 1893.

Application filed April 29, 1893. Serial No. 472,388. (No model.)

To all whom it may concern:

Be it known that I, JAMES RICHARD HAWKINS, a citizen of the United States, residing at Benjamin, in the county of Utah, Utah Territory, have invented certain new and useful Improvements in Centrifugal Honey-Extractors; and I do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to the letters of reference marked thereon, which form a part of this specification.

This invention relates to certain new and useful improvements in honey extractors and it has for its objects among others to provide a simple and cheap honey extractor, composed of few parts and those readily assembled and dissembled when necessary, and not liable to be injured. I provide improved baskets for holding the honey comb while being operated upon and simple and novel means for supporting the same detachably in position. I also provide simple and improved means for rotating the carrier with its baskets and for reversing the movement.

Other objects and advantages of the invention will hereinafter appear and the novel features thereof will be specifically defined by the appended claims.

The invention in the present instance resides in the peculiar combinations, and the construction, arrangement and adaptation of parts, all as more fully hereinafter described, shown in the drawings and then particularly pointed out in the claims.

The invention is clearly illustrated in the accompanying drawings, which, with the letters of reference marked thereon, form a part of this specification, and in which—

Figure 1 is a perspective view of a honey extractor constructed in accordance with my invention. Fig. 2 is a vertical longitudinal section through one of the honey-baskets and its support showing the manner of connecting the same. Fig. 3 is a plan of the triangular plate and its connections with the basket-operating rods or shafts.

Like letters of reference indicate like parts throughout the several views.

Referring now to the details of the draw-

ings by letter, A designates the case or receptacle within which is mounted the vertical shaft B which is provided with a suitable means for rotating it; it may be any suitable means; I have shown a crank handle *b* but any other suitable device or devices may be employed.

C is the extractor frame; it is provided with a vertical centrally-arranged tubular shaft or sleeve *C'* through which the shaft B passes. This frame is provided with the parallel arms D arranged in pairs extending radially from the center outward as shown and the outer ends of these arms are connected by the vertical pieces *d*. These vertical pieces are connected with each other by the wires E which are secured thereto at top and bottom in any suitable manner and are crossed about midway between each two vertical pieces as shown, being either connected or twisted at their points of intersection or not as may be found most expedient. These crossed wires form yielding stops for the honey-baskets, as will soon appear, and prevent too great movement thereof outward.

Near the outer end of each pair of arms D is mounted a vertical rod or shaft F which is held at its upper end in any suitable manner as by being provided with a head *f* and its lower end is passed loosely through an opening in the lower arm and bent to form a crank arm or portion *F'* as shown.

On the lower end of the shaft B is fast a triangular plate G which is secured to the said shaft near one of the angles thereof while to one of the other angles there is pivotally connected a bar or rod H near its center, its ends being pivotally connected in any suitable manner to the lower ends of opposite crank portions of diametrically opposite shafts or rods F as shown. To the other angle of the plate G is pivotally connected a bar or rod I near its center, its ends being pivotally connected with the lower ends of the crank portions of the other shafts F as shown.

J are the honey-baskets formed of wire or some suitable reticulated medium and of the proper size and shape and are designed to hold the honey. These baskets are supported in operative position by means substantially as follows:—At one end the basket

is provided with a plate or bar J' having the vertical rectangular openings j, and upon the shaft F are adjustably secured by the set screws k the collars K each having a vertical hook K' to enter the openings in the end plate of the basket and then allow the baskets to drop so that the hooks will engage in the recesses l in the inner face of the end plate and thus hold the basket against displacement, the hooks being practically flush with the inner face of the said plate as shown.

The operation will be readily understood from the foregoing description when taken in connection with the annexed drawings, and a further detailed description thereof is not deemed necessary. The honey is extracted by centrifugal action and the baskets are designed to be reversed to cause them to engage a stop to either the right or left as may be desired.

Modifications in detail may be resorted to without departing from the spirit of the invention or sacrificing any of its advantages.

What I claim as new is—

1. In a centrifugal honey-extractor the combination with the frame and the vertical shaft, of the honey-basket shafts, the triangular plate on the lower end of the main shaft, and the independent connections between said plate and the basket-shafts, as set forth.

2. In a centrifugal honey-extractor the combination with the frame and the vertical shaft, of the triangular plate on the end of the shaft, the basket-shafts, and the bars pivotally connected with said plate and with said shafts, substantially as specified.

3. In a centrifugal honey-extractor the combination with the basket-shaft and its operating means, of the honey-basket having an end plate with slots, and the collars provided with hooks on the shaft, substantially as and for the purpose specified.

In testimony whereof I affix my signature in presence of two witnesses.

JAMES RICHARD HAWKINS.

Witnesses:

JOHN HAWKINS,

W. L. WORSENCROFT.