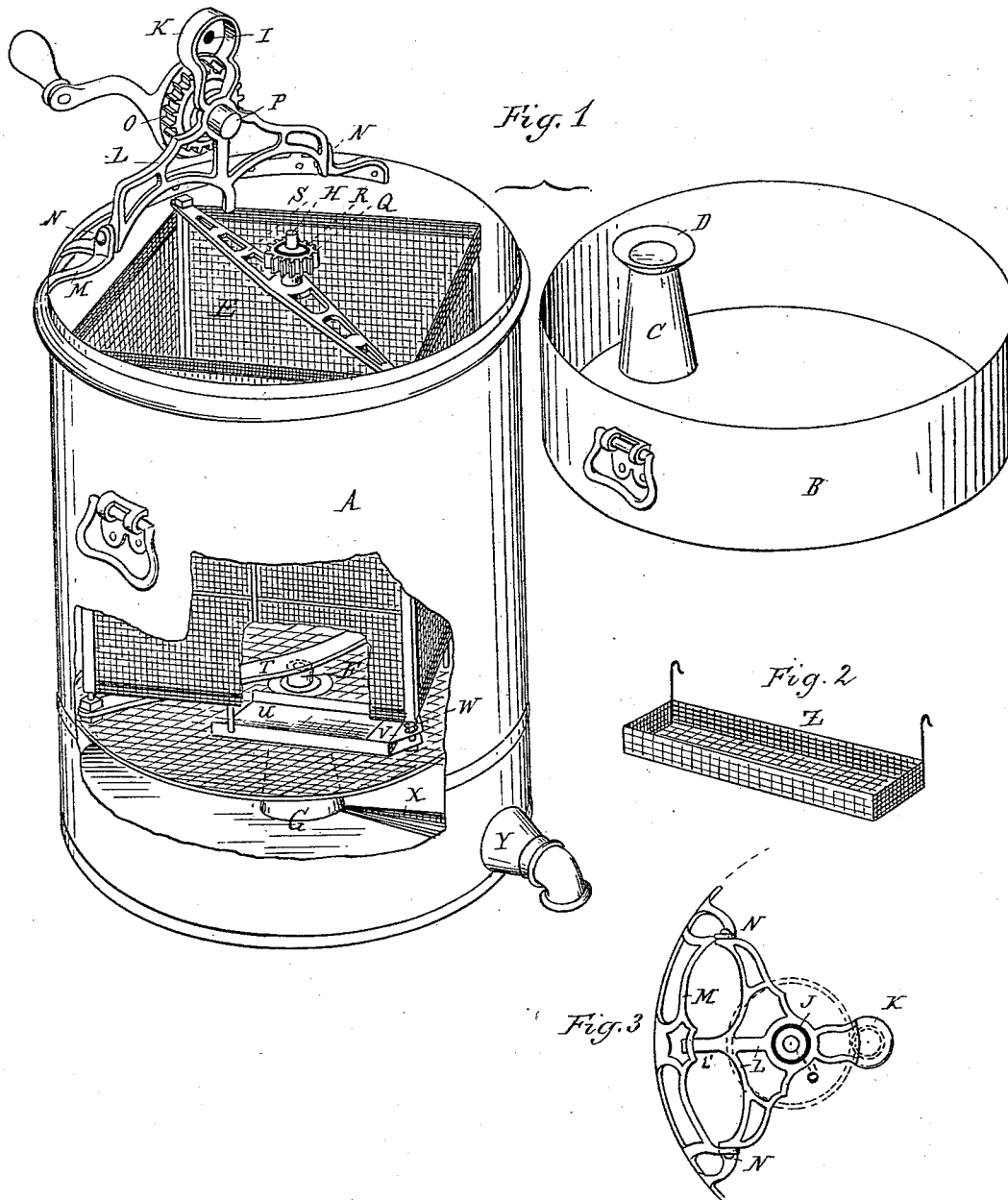


(No Model.)

E. T. LEWIS.
HONEY EXTRACTOR.

No. 278,713.

Patented June 5, 1883.



Witnesses:
Saml. H. Moore,
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Inventor:
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UNITED STATES PATENT OFFICE.

EDWARD T. LEWIS, OF TOLEDO, OHIO.

HONEY-EXTRACTOR.

SPECIFICATION forming part of Letters Patent No. 278,713, dated June 5, 1883.

Application filed August 21, 1882. (No model.)

To all whom it may concern:

Be it known that I, EDWARD T. LEWIS, of Toledo, in the county of Lucas and State of Ohio, have invented a new and useful Improvement in Honey-Extractors, of which the following is a specification.

Figure 1 is a perspective with part of the can broken away and the cover detached. Fig. 2 is a detached perspective. Fig. 3 is a plan view of the hinge which carries the gearing.

The improvements will be first described in detail, and afterward pointed out in the claims.

A represents a metal can, having a faucet, Y, for drawing off its contents.

G is a step fastened to the center of the bottom of can A.

E is a rectangular basket, of wire-cloth, stiffened suitably by horizontal and vertical wires soldered together and to the basket, and having rigidly fastened thereto at top and bottom the cross-bars S and T, which may be set diagonally, as shown, or parallel with two sides of the basket.

Fastened to the center of the cross-bar T is a spindle, F, which runs in a bearing in the top of step G and supports basket E.

To the center of cross-bar S is fastened a spindle, H, on which is rigidly secured a toothed pinion, Q, in the upper side of which is cut a deep circular groove R.

M is a frame-work of metal, riveted to the inside of can A at its top, and to this is pivoted or hinged at points N N a metal frame, L.

At the end of frame L is a cap, K, to cover the pinion Q, and in the center of cap K, and at a point in the same vertical plane as the bearing in step G, is a bearing, I, in which the end of spindle H runs. O' is a bearing cut in frame L, in which runs the spindle of a cog-wheel, O, provided with a crank, by which it can be revolved, and meshing into pinion Q when spindle H is in bearing I. J is a deep circular groove around bearing O', to catch and retain any oil that may escape from said bearing. The part L' of frame L strikes against the under side of frame M, when frame L is turned down, and a button is pivoted to part L' at any point thereof, which can be turned over frame M to prevent frame L swinging upward. This button is omitted to simplify the drawings.

Z is a tray made of wire-cloth, and provided with hooks by which it can be hung to the inner side of basket E at any point.

U is a tray to hold the comb, pivoted on rod V, which is fastened to one corner of basket E, so that tray U can be swung under either of the sides of basket E, which meet at the corner where rod V is fastened. W is a small spiral spring around rod V to prevent tray U from moving too easily, and wire stops project below the sides of basket E to limit the range of motion of tray U. A similar tray is pivoted to the opposite corner of basket E.

B is a cover for can A, made deep enough to hold the caps cut from the combs, and provided with a rest, C, having a saucer-shaped end, D, to support the comb-frame while the operator is uncapping the combs.

This extractor operates upon the familiar principle of centrifugal force, and differs from extractors in ordinary use as follows: The comb, being uncapped, is placed upon tray U, two combs being operated upon at once, and basket E is revolved until the honey contained in that side of the comb next to the side of basket E is extracted. Tray U is then swung through a quarter-revolution, which brings the other side of the comb against the side of the basket, and the honey contained therein is extracted, as before. The absence of the vertical spindle running through the center of the basket in other extractors permits the swinging of the trays and comb and obviates the lifting out and turning of the comb necessary in other extractors.

When the combs are small, movable trays Z can be hooked to the sides of basket E at the height of the combs from the top of the basket E, so that the operator is not obliged to reach down into the basket to turn or remove the combs.

As ordinarily made, the upper and lower edges of basket E are bound with strips of tin, which hold the honey in those cells in the combs which rest against the tin. This is obviated by using wire-cloth with selvage edges.

What I claim as my invention, and desire to secure by Letters Patent, is—

1. In a honey-extractor, the combination of a can, a foraminous basket having its lower end

- supported by a step in the can, whereby no spindle passes through the basket to provide for the insertion therein of trays, with a cross-bar rigidly secured to the upper end of the basket and provided at its center with an attached pinion, and a frame hinged to the can and provided with a cog-wheel adapted to engage and disengage the pinion on the cross-bar of the basket, substantially as described.
2. The combination, in a honey-extractor, of a can having a central step at its bottom, a foraminous basket supported on said step, whereby no spindle passes through the basket, a cross-bar rigidly fixed to the upper end of the basket, a pinion fixed to the center of the cross-bar and having a projecting spindle, a frame hinged to the can and provided with a cog-wheel, and a cap having a center bearing to fit the spindle on the pinion of the cross-bar, substantially as described.
3. In a honey-extractor, the combination, with a revolving basket composed of wire-cloth, of comb-holding trays pivoted at or near the corners of the bottom of the basket, and arranged to swing horizontally beneath the said bottom of the basket to bring the combs successively against the sides of the latter, substantially as described.
4. The combination, with the foraminous basket of a honey-extractor having its lower end supported in a step and having its upper end provided with a rigidly attached cross-bar carrying a fixed pinion, of a hinged frame carrying the devices to operate the pinion on the cross-bar, substantially as described.
5. In a honey-extractor, the combination, with the can and revolving basket, of the can-cover B, constructed with a receptacle to hold the caps cut from the combs, and provided with in its cap-holding receptacle with an upright rest, C, having its end constructed to support the comb-frame while being uncapped, substantially as described.
6. The combination of the revolving basket E with the adjustable tray Z, as and for the purposes set forth.
7. A revolving basket for extracting honey, having its top and bottom constructed with selvaged edges, substantially as and for the purpose described.
8. In a honey-extractor of the character described, the combination, with the driving-gearing and the upright basket-driving spindle H, of the pinion Q, fixed to the upper end of the said shaft, and constructed with the surrounding groove R for preventing the lubricating material from falling into the honey, substantially as described.
9. In a honey-extractor of the character described, the frame L, having the bearing O' for the spindle of the driving cog-wheel O, and constructed with the groove J, surrounding the spindle of the cog-wheel to catch and retain any lubricant escaping from the bearing, substantially as described.

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Witnesses:

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