No. 625,838. Patented May 30, 1899.

L. M. DEVORE.

LEMON SQUEEZER.

(Application filed June 13, 1898.)

(No Model.) 2 Sheets—Sheet 1.

Fig. 1

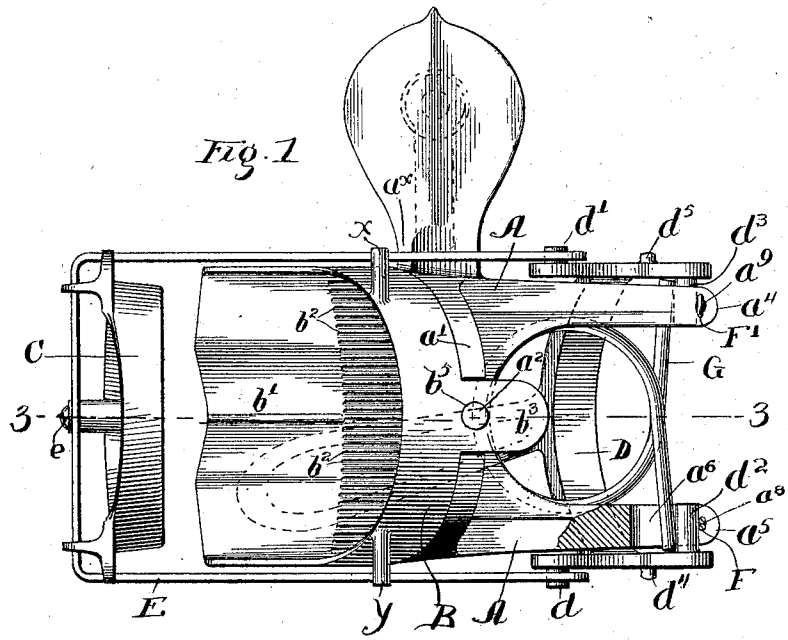
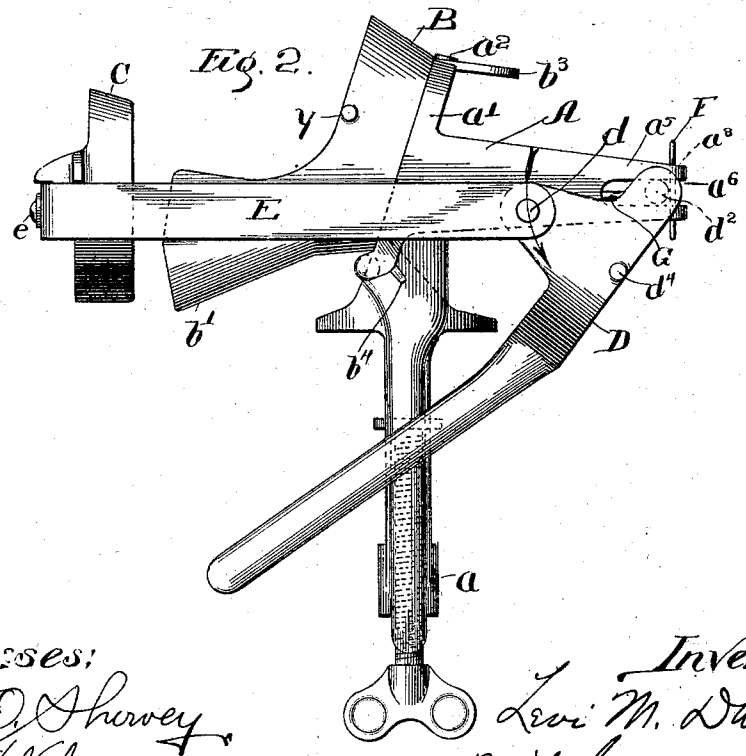


Fig. 2.



Witnesses:
Chas. O. Shurvey
A. D. Nelson

Inventor:
Levi M. Devore,
by Miles Brauer & Bitner
Attys.

THE NORRIS PETERS CO., PHOTO-LITHO., WASHINGTON, D. C.

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(No Model.) 2 Sheets—Sheet 2.

Fig. 3.

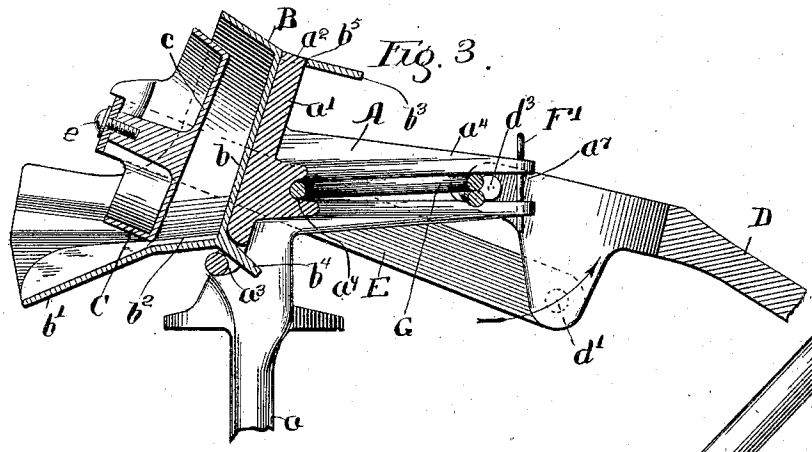


Fig. 4.

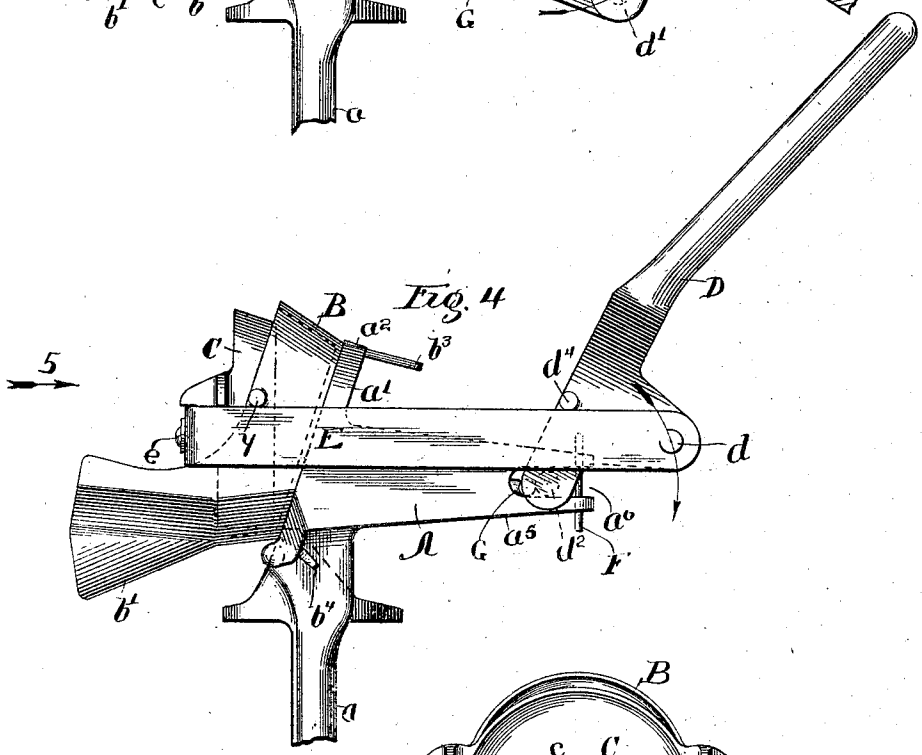
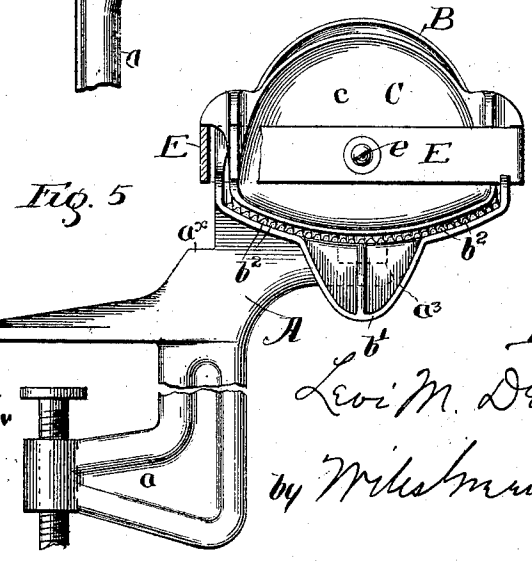


Fig. 5.



Witnesses:

Chas. O. Sherwey

A. D. Nelson

Inventor:

Levi M. Devore,

by Mills Manes & Bitner

Attys.

THE NORRIS PETERS CO., PHOTO-LITHO., WASHINGTON, D. C.

UNITED STATES PATENT OFFICE.

LEVI M. DEVORE, OF FREEPORT, ILLINOIS, ASSIGNOR TO THE ARCADE MANUFACTURING COMPANY, OF SAME PLACE.

LEMON-SQUEEZER.

SPECIFICATION forming part of Letters Patent No. 625,838, dated May 30, 1899.

Application filed June 13, 1898. Serial No. 683,251. (No model.)

To all whom it may concern:

Be it known that I, LEVI M. DEVORE, a citizen of the United States of America, residing at Freeport, in the county of Stephenson and State of Illinois, have invented certain new and useful Improvements in Lemon-Squeezers, of which the following is a specification.

My invention relates to certain improvements in lemon-squeezers, the objects of which are to attain great rapidity and ease of operation, together with a complete extraction of the juice from the lemon.

To such ends the invention consists in certain novel features below described and claimed.

The drawings present the improved form of the invention by means of five figures, of which—

Figure 1 is a plan view. Fig. 2 is a side elevation. Fig. 3 is a longitudinal vertical section in line 3 3 of Fig. 1. Fig. 4 is a side elevation with the parts in a different position, and Fig. 5 is an end elevation looking from the position and in the direction of the arrow 5 in Fig. 4.

The device, as here shown, is made up of a frame A, a cup B, a plunger C, and an operating-handle D.

The frame A is shown as provided with an ordinary clamp a, by means of which it may be secured to a table or shelf. It also has a face-plate a', (best shown in Figs. 2, 3, and 4,) against which the cup B may rest and by which it is supported against the pressure of the plunger. At the top of said face-plate is a lug a^2 and at the bottom an opening a^3, the use of which will be described in connection with the cup. Said frame also has two rearwardly-projecting arms a^4 a^5, the ends of which are provided with horizontal slits a^6 a^7 and with vertical holes a^8 a^9, the use of which will be described in connection with the operating-handle.

The cup B is provided with a preferably oblique bottom b against which the lemon may be pressed, from the lower portion of which extends a spout b' to carry the juice to a convenient receptacle. The lower side of the cup is provided with a series of ribs b^2 to support the lemon and allow the juice to run out beneath the same. Said cup has two rearwardly-projecting tongues b^3 b^4, the first of which is provided with a hole b^5, fitting over the lug a^2, and the latter of which fits the opening a^3. In placing the cup upon the frame the tongue b^4 is inserted in the opening a^3 and the hole b^5 dropped over the lug a^2. The plunger C is fitted to the cup and has a face c, corresponding to the bottom of the latter. It is carried by a yoke E, secured to it by the screw e and extending rearward to the operating-handle. The yoke itself is carried, when in the position seen in Fig. 2, upon a shoulder a^x of the frame. (See Fig. 5.) This shoulder sustains the yoke and the plunger until the latter enters the cup, after which the weight of both yoke and plunger rests upon the bottom of the cup. A pair of lugs x y (see Fig. 1) upon the cup assist in guiding the plunger into the latter, as is clearly seen in Fig. 4.

The operating-handle D is pivoted to the ends of the yoke by means of gudgeons d d' and is pivoted in the slits a^6 a^7 by means of a second pair of gudgeons d^2 d^3. Pins F F', fitted to the holes a^8 a^9, hold the gudgeons d^2 d^3 in the slits, and the ends of a coiled spring G press said gudgeons toward the pins. This spring is held in place by means of a groove a^y in the frame and by its ends extending in opposite directions into the slits. A pair of lugs d^4 d^5 upon the handle engage the arms of the yoke in the position seen in Fig. 4 and check the upward movement of said handle.

It should be noticed that the parts are so proportioned that as the plunger reaches the position in which it commences to squeeze the lemon, which is shown in Fig. 3, the top of the plunger is in advance of the bottom; also, that said position continues until the upper portion of the lemon has been thoroughly squeezed at the top and that thereafter the lower part of the plunger is drawn toward the bottom of the cup without any further advance of the top until the squeezing operation is complete, thus gradually forcing the juice from the top to the bottom of the lemon and out of the latter.

In the use of this device the lemons are preferably to be cut in halves and placed in the cup with the cut face downward, although it is indeed possible to thoroughly extract the

juice by merely making a hole in an entire lemon and placing said hole downward.

Fig. 4 shows the extreme upward movement of the handle, in which position the plunger has tilted beyond the position of complete compression of the lemon.

The amount of compression is governed by the spring G, so that the proper compression is obtained irrespective of the thickness of the rind or the size of the lemon.

I claim as new and desire to secure by Letters Patent—

1. In a lemon-squeezer, the combination with a suitable framework, of a cup and plunger supported thereby and means for advancing one toward the other and for giving one a tilting motion with respect to the other during the compression of a lemon, whereby said compression may be completed at one portion of the cup before it is completed at another portion; substantially as described.

2. In a lemon-squeezer the combination with a suitable frame, cup and plunger, of spring-controlled means for bringing the cup and plunger together whereby the limit of compression of the lemon is fixed by the tension of the spring substantially as described.

3. The combination with a frame, A, having the face-plate, a', provided with the lug, a^2, and the opening, a^3, of the cup, B, having the tongue, b^3, provided with the opening, b^5, adapted to fit over the pin, a^2, and the tongue, b^4, adapted to enter the opening, a^3; substantially as described.

4. In a lemon-squeezer, the combination with a suitable frame, cup and plunger, of the yoke, E, embracing the plunger and secured thereto and the handle, D, pivoted to the yoke and to the frame, the pivotal points being so located that they may be substantially in line with the plunger at the moment of greatest compression of the lemon; substantially as described.

5. In a lemon-squeezer, the combination with a suitable frame and the cup, B, having its bottom in a substantially upright position, of the plunger, C, adapted to enter said cup, the yoke, E, secured to the plunger, an operating-handle pivoted to the ends of the yoke and to the frame and a support for the yoke between the plunger and the handle adapted to sustain the yoke when the plunger leaves the cup; substantially as described.

In witness whereof I have hereunto set my hand, at Freeport, in the county of Stephenson and State of Illinois, this 7th day of June, A. D. 1898.

LEVI M. DEVORE.

Witnesses:
H. H. ANTRIM,
H. A. MEYER.