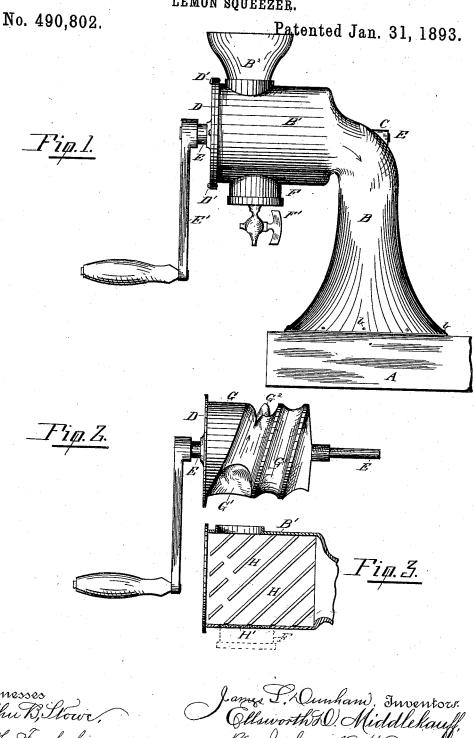
## J. S. DUNHAM & E. D. MIDDLEKAUFF. LEMON SQUEEZER.



Witnesses Sihu B, Llowe, Jour H. Thankenheimer

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## UNITED STATES PATENT OFFICE.

JAMES S. DUNHAM AND ELLSWORTH D. MIDDLEKAUFF, OF STOCKTON, CALIFORNIA.

## LEMON-SQUEEZER.

SPECIFICATION forming part of Letters Patent No. 490,802, dated January 31, 1893. Application filed July 2, 1890. Serial No. 357,579. (No model.)

To all whom it may concern:

Be it known that we, JAMES S. DUNHAM and ELLSWORTH D. MIDDLEKAUFF, citizens of the United States, residing at Stockton, in the 5 county of San Joaquin and State of California, have invented certain new and useful Improvements in Lemon-Squeezers; and we do declare the following to be a full, clear, and exact description of the invention, such as will to 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.

Our invention relates to lemon squeezers and its object is to provide a device by which a lemon may be halved, squeezed and the skins and pulp ejected, the steps being taken in the order mentioned and by one operation

20 of the machine.

The invention consists of a body and a cylinder, containing a grooved roller or core which has a knife or cutter on its face and in such other novel features of construction and 25 combination of parts, hereinafter described and specifically pointed out in the claims.

Referring to the drawings: Figure 1 is a side elevation. Fig. 2 is a side elevation of the roller or core and the crank detached. Fig. 30 3 is a section of the cylindrical part, showing the ribs on the inside.

Like letters of reference indicate like parts in all the figures of the drawings.

A represents a table top or counter.

B is the body or trunk of the machine secured by the bolts b to the table top. The body B is bell shaped and at its top has a forwardly inclined neck, terminating in a cylinder B' at right angles to the body B. A fun-40 nel B2 is attached to the top of the cylinder B' for the reception of the lemons. At the back of the neck of the body B is a bearing C for a shaft E, which has its outer bearing in a face plate D, attached to the face of the 45 cylinder B' by the bolts D'. On the end of the shaft E is a suitable crank E'. The shaft E carries a spirally grooved roller or core, having a lemon pocket G' at one end of the groove, a cutter G<sup>2</sup>, and terminating in a chan-50 nel G<sup>3</sup> for the escape of the pulp of the lemon.

is provided at its bottom with perforations H', which permit the lemon juice to escape into a receptacle F beneath the head from which it

may be drawn off by a faucet F'.

In operation the roller or core G, is turned so as to bring the pocket G', into alignment with the funnel opening B2, when the lemon is dropped through said opening into the said pocket. Now it will be seen that when the 60 core is turned, the lemon will be squeezed and held by the ribs H, upon the interior of the cylinder B', and by the continued movement of the core the squeezed lemon will leave the pocket G', and be held in the wide 65 groove until it is severed by the knife G2, fixed in the said groove, when the severed portions being squeezed between the core and the ribs H, the juice is expressed and passes down through the strainer perforations H', 70 into the receptacle below the same, while the skins and pulp are conducted by the spiral groove or channel G2, G3, back into the body or pocket B, whence they are removed through an opening as has been described.

Having thus described our invention what

we claim is:

1. In a lemon squeezer the combination substantially as described of the bell shaped body B, the cylinder B', provided with the funnel 80 B2 and with the juice receptacle F and faucet F', said cylinder B' being at right angles to the body B, the shaft E and its rear bearing C, its front bearing the face plate D attached to the face of the head B' by the bolts 85 D', the handle E' attached to the shaft E, the roller G upon the shaft E and provided with the lemon cup G', cutter G3 and channel G3, and the ribs H upon the inside of the cylinder B'.

2. The combination of the body B and the cylinder B' at right angles thereto, of the shaft E, carrying the grooved core G, provided with a lemon cup, cutter and pulp channel, the said cylinder B' having a funnel on its 95 top, a juice receptacle at its bottom, and ribs H on its inside surface, all arranged and operating substantially as described.

3. In a lemon juice extractor, the combination with a cylinder provided with ribs upon 100 its interior and having the inlet and outlet The inside of the cylinder B' has ribs H and I openings for the lemon, and strainer perforations for the passage of the expressed juice thereof; of a core or roller mounted on a shaft suitably journaled in the cylinder, the peripheral spiral groove in said core or roller adapted to conduct the pulp and skin of the lemon to the discharge opening therefor, and the knife arranged at a suitable point in the said groove, adapted to cut the lemon, whereby the juice may be expressed, substantially as and to for the purpose set forth.

4. The combination with the cylinder, having the ribs upon its interior and provided with feed and discharge openings for the lemon and a strainer discharge for the expressed juice thereof; of a core or roller mounted on a shaft suitably journaled in the

cylinder and provided with a peripheral spiral groove whereby the lemon pulp and skin are conducted to the discharge opening therefor, the pocket arranged at a suitable point 20 in said groove for the reception of the lemon from the feed opening; and a knife also arranged in said groove and adapted to cut the lemon whereby the juice may be expressed, substantially as specified.

In testimony whereof we affix our signatures

in presence of two witnesses.

JAMES S. DUNHAM.

ELLSWORTH D. MIDDLEKAUFF.

Witnesses:

JOSHUA B. WEBSTER, JAMES T. SUMMERVILLE.