(No Model.) 2 Sheets—Sheet 1.

W. O. DUNLAP.

LEMON SQUEEZER.

No. 420,868. Patented Feb. 4, 1890.

Fig. 1

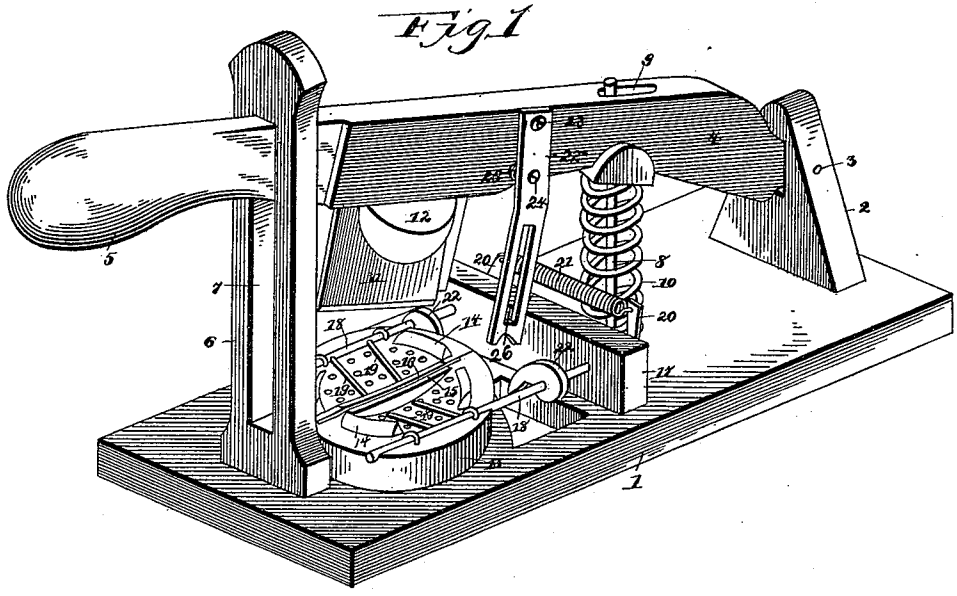


Fig. 2.

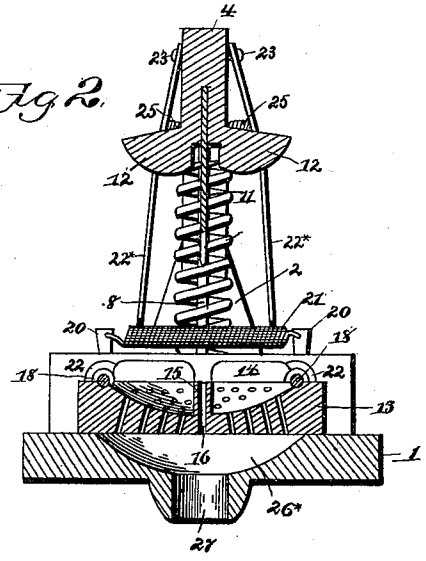
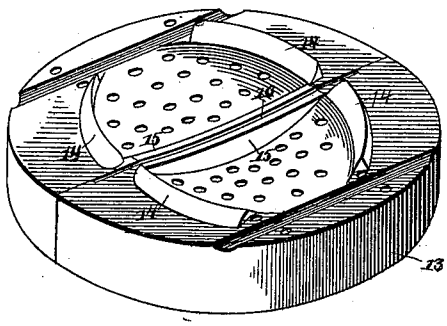


Fig. 6.



Witnesses:

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Inventor

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N. PETERS. Photo-Lithographer, Washington, D. C.

(No Model.) 2 Sheets—Sheet 2.

W. O. DUNLAP.

LEMON SQUEEZER.

No. 420,868. Patented Feb. 4, 1890.

Fig. 3.

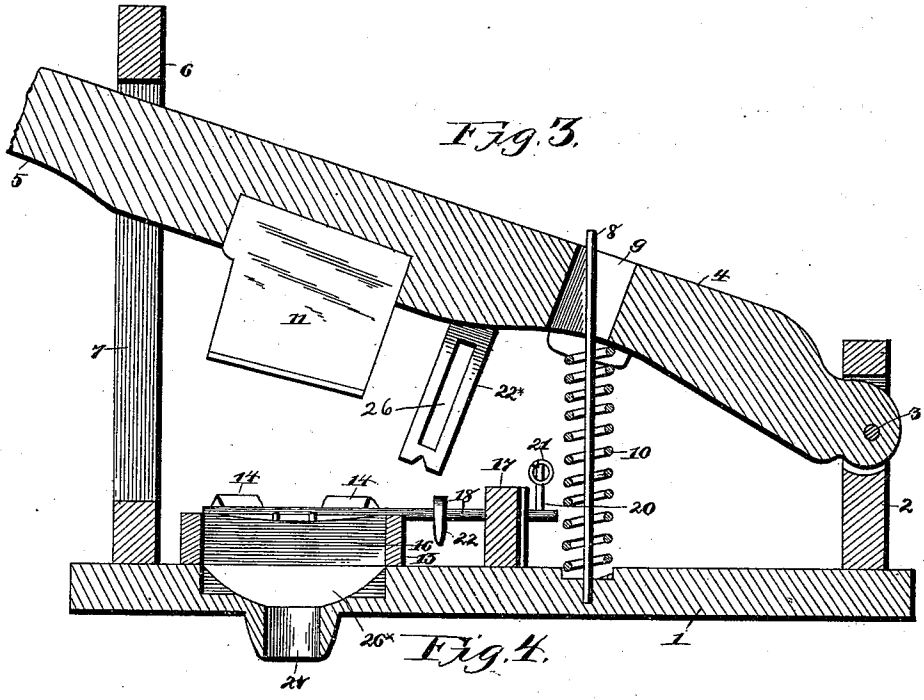


Fig. 4.

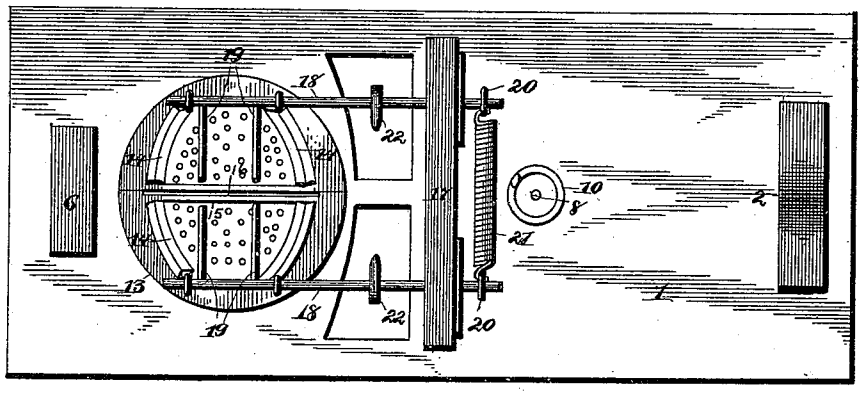
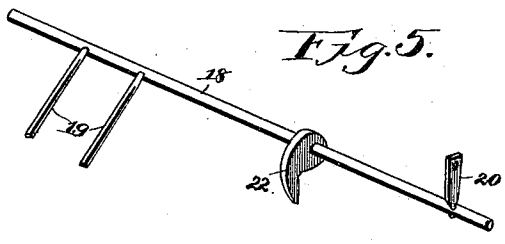


Fig. 5.



Witnesses

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UNITED STATES PATENT OFFICE.

WILLIAM O. DUNLAP, OF GEORGE'S CREEK, TEXAS.

LEMON-SQUEEZER.

SPECIFICATION forming part of Letters Patent No. 420,868, dated February 4, 1890.

Application filed September 24, 1889. Serial No. 324,881. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM O. DUNLAP, a citizen of the United States, residing at George's Creek, in the county of Somervell and State of Texas, have invented a new and useful Lemon-Squeezer, of which the following is a specification.

This invention has relation to lemon-squeezers; and among the objects in view are to provide a device to which a lemon may be subjected and halved, squeezed, and the skins ejected, the steps being taken in the order mentioned and by one operation of the machine.

With these general objects in view the invention consists in a pivoted lever carrying a knife and opposite squeezers, lemon-cups arranged below the knife and in line with the squeezers, and in rocking ejectors mounted over the cups and operated by the movement of the lever.

The invention consists in certain other features of construction and novel combination of parts hereinafter specified, and particularly pointed out in the claims.

Referring to the drawings, Figure 1 is a perspective of a squeezer constructed in accordance with my invention. Fig. 2 is a transverse section taken through the squeezer and lemon-cups. Fig. 3 is a longitudinal section; Fig. 4, a plan, the lever removed; Fig. 5, a detail of the rock-shaft and ejector; Fig. 6, a detail in perspective of the lemon-receiving cup.

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

1 represents a suitable base, adapted to be secured to a table, bar, or other support, and to the rear end of the same there is secured a standard 2, to which, by a pintle 3, is secured a lever 4, which projects forward beyond the opposite end of the base and terminates in an operating-handle 5. From the front end of the base there projects upwardly a standard 6, having a vertical longitudinal slot 7, which receives the lever 4 and acts as a guide for the same. From the base 1, near the rear end of the lever 4, there rises a guide 8, the upper free end of which projects through a slot 9, formed in the lever 4, and between the under surface of the lever and the upper surface of the base and terminating in suitable concavities formed therein, and encircling the guide-rod 8, is a coiled spring 10, which serves to maintain the lever in a normally-raised position. Secured to the under surface of the lever, near the standard 6 and depending therefrom, is a fixed blade 11, and at each side of the blade there projects laterally from the lever semi-convexed squeezers 12.

13 represents the lemon receiving and straining cup, and the same is formed in two halves, each of which is provided with a concaved upper surface and is perforated to permit the passage of the juice of the lemon therethrough. Curved flanges 14 partially surround the edge of said cup, and the adjacent edges of the sections are provided with transverse flanges 15, which are slightly spaced apart to form a recess 16 for the reception of the lower edge or blade of the knife.

17 represents a standard located transversely upon the base 1 and in rear of the lemon-receiving cup 13. Near the opposite ends of the standard 17 there is journaled rock-shafts 18, the forward ends of which extend over upon and are loosely connected with the lemon-receiving cup 13 near the outer edge of each of the sections. The curved flanges of the sections are cut away directly opposite the rock-shafts, and from the rock-shafts there project inwardly at each side of the cup ejecting-arms 19. The outer ends of the rock-shafts in rear of the standard 17 are provided with rock-arms 20, the pair being connected by a coiled spring 21. In front of the standard 17 the rock-arms are provided with hook-shaped cams 22, the inner hooked ends of which are inwardly disposed and normally depend. At each side of the lever 4 and in line with the cams there is secured to said lever and depend therefrom arms 22*, the upper ends of which are bolted to levers by bolts 23, and below the same there passes through the arms guide-pins 24, around which are arranged coiled springs 25, interposed between the sides of the lever and inner faces of the arms, by which said arms are supported outwardly from the sides of the lever, and are capable of being compressed inwardly. The lower end of each of the arms is provided with an elongated slot 26, adapted,

when the lever is depressed, to engage the hooks of the cam.

The operation of the invention is as follows: A whole lemon is placed in the cup 13 and the lever 4 depressed, and the blade 11 thereof first comes into contact with the lemon and halves the same. By the time the halving is completed the squeezers come in contact with the halves and compress the same, thus thoroughly removing the lemon-juice. After the juice has been removed and has passed down through the perforations of the sections and out through the bottom or base 1 the lever 4 is raised. It will be noticed that when depressed the ends of the yielding arms have ridden over the cam-faces of the hooks until the slots in said arms have registered with and taken under the hooks. Now, when the lever is raised subsequent to the squeezing operation, the rock-shafts 18 will be rocked outwardly by reason of the cam-hooks engaging the arms, and in so doing the ejector-arms 19 will be rocked outwardly and throw the lemon-skins to each side of the base, when the operation may be repeated. After the lever 4 has been raised to such a height that its slotted arms disconnect from the cam-hooks the retracting-spring 21 serves to return the rock-shaft, ejector-arms, and cam to their normal position.

It will be observed that a conical recess 26* is formed directly under the cups 13, and from the cups the juice passes into the recess, and thence through the reduced opening 27 into any receptacle placed under the same.

Having described my invention, what I claim is—

1. In a lemon-squeezer, the combination, with a lemon-cup, of ejectors pivotally mounted at each side of the cup and normally lying upon and extending thereover, and means for swinging the ejectors away from the same, substantially as specified.

2. In a lemon-squeezer, the combination, with a lemon-cup, of rock-shafts mounted at each side of the same and provided with ejector-arms, and means, substantially as specified, for operating the rock-shafts, substantially as specified.

3. In a lemon-squeezer, the combination, with a lemon-cup, of rock-shafts mounted each side of the cup and provided with ejector-arms depending into the cup on opposite sides thereof, a spring connecting the rock-shafts, a lever pivoted above the same, and devices adapted to engage each other mounted on the rock-shafts and lever, whereby a raising of the lever operates the rock-shafts, substantially as specified.

4. In a lemon-squeezer, the combination, with a lemon-cup and rock-shafts located at each side thereof, ejector-arms projecting from the rock-shafts and extending into the cup, cam-hooks mounted on the rock-shafts, and a spring for connecting the rock-shafts, of a pivoted lever having depending yielding arms slotted and arranged in a line with the cam-hooks and adapted to be compressed to engage, operate, and liberate the same by the raising of the lever, substantially as specified.

5. The combination, with the base 1, the standard 2 at the rear end thereof, the lever 4, and the pintle 3 for securing the same to the standard, of the guide 6, slotted as at 7, arranged at the opposite end of the standard to receive the lever, the guide-rod 8, extending from the base and through an opening 9, formed in the lever, the spring 10, encircling the guide-rod and interposed between the lever and base, and the fixed knife 11 and squeezers 12, secured to the lever, and the lemon-receiving cup 13, arranged below the same, substantially as specified.

6. The combination, with the cup 13, standard 17, and opposite rock-shafts 18, mounted in the standard and cup, the ejectors projecting from the rock-shafts, cam-shaped hooks mounted on the rock-shafts, and rock-arms mounted at the ends of the rock-shaft, and a coiled spring connecting the same, of the pivoted lever 4, provided with opposite arms bolted at their upper ends to the lever, studs or pins projecting from the lever and extending through the arms, coiled springs mounted on the pins, and slots formed in the lower ends of the arms and adapted to engage the cam-hooks, substantially as specified.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in presence of two witnesses.

WILLIAM O. DUNLAP.

Witnesses:
ZEB. MOBLEY,
BROWN DOUGLAS.