E. M. SAMMIS

LEMON-SQUEEZER.

No. 172,505. Patented Jan. 18, 1876.

FIG. 1.

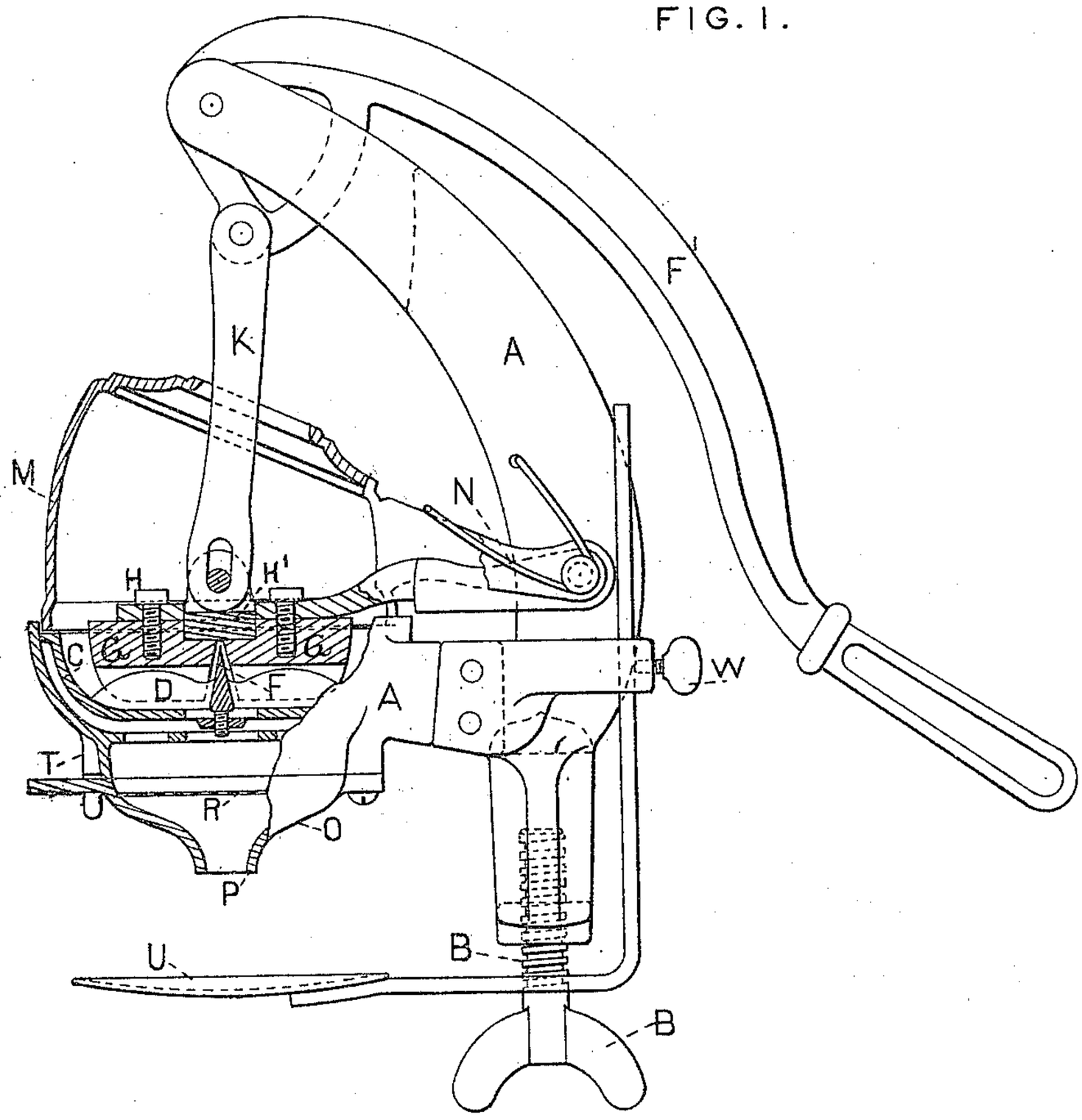


FIG. 2.

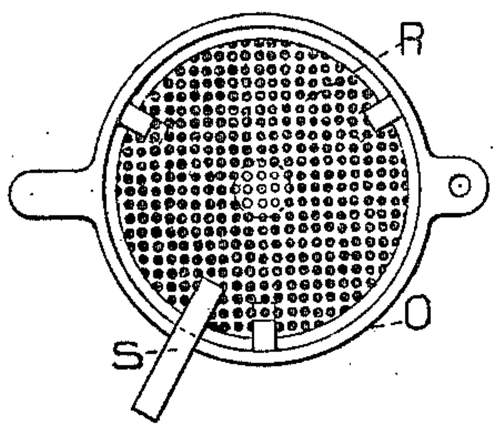
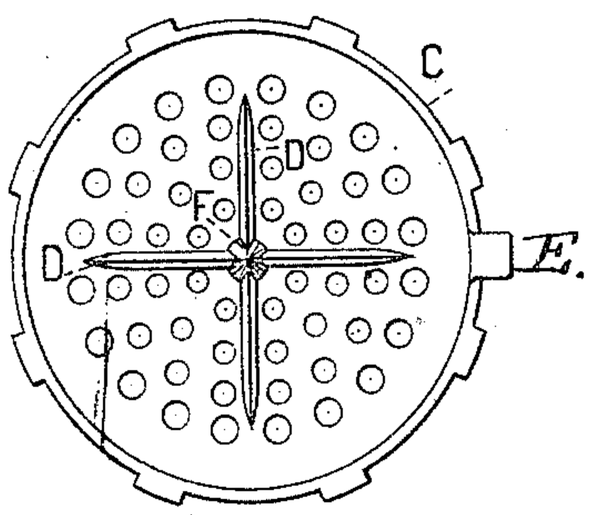


FIG. 3.



WITNESSES.

Boyd Elliot

John W. Ripley

Edward M Sammis

INVENTOR.

UNITED STATES PATENT OFFICE.

EDWARD M. SAMMIS, OF NEW YORK, N. Y.

IMPROVEMENT IN LEMON-SQUEEZERS.

Specification forming part of Letters Patent No. **172,505**, dated January 18, 1876; application filed June 18, 1875.

To all whom it may concern:

Be it known that I, EDWARD M. SAMMIS, of the city, county, and State of New York, have invented certain Improvements in Lemon-Squeezers, of which the following is a specification:

This invention has for its object the extraction of the juice of the lemon or similar fruits by the process of squeezing the mass by mechanical means, and at the same time perforating the rind, in order that the juice may escape therefrom; and the invention consists of a novel construction and combination of parts for producing a lemon-squeezer which will prove very efficient and useful in operation.

The improvements are hereinafter fully described, and then specifically pointed out in the claims.

Figure 1 represents a side elevation and section of the machine complete. Fig. 2 is a plan of one of the strainers; and Fig. 3 is a plan of the disk or cup that holds the knife or cutting edges for scarifying the skin, as also the strainer and cup for receiving the pulp, as will hereinafter appear.

At A is represented the main portion of the frame or support for the entire apparatus, and it is shown with a part of the cup portion broken away and in sections, but one part is shown in elevation, and to this portion a binding-screw, as at B, is attached for the purpose of fastening the apparatus to a shelf or table in the ordinary way of supporting such machines. At C is shown the cup that receives the lemon to be pressed, and upon the bottom of said cup is fastened the knife or cutters, as at D, that cut the lower side of the lemon for the outlet of the juice as the operation of pressing it takes place. Said cup is also shown at Fig. 3, where a projection, as at E, is represented upon its rim, which is for the purpose of fitting into a recess in the frame A, and thereby holds the cup and the cutters also, which are fastened upon the bottom of the cup, as shown at D, in proper relative position to the moving jaw.

It will be seen that the cutters are curved on their edges, so that the operation of cutting the rind will begin at one point first and then progress or extend farther as the process continues.

A center point, as at F, may also be used, if desired, upon which the lemon may be placed and punctured when first placed in the cup. At G is shown the follower or moving jaw of the squeezer, and it is, preferably, made of wood, and fastened by screws to a metal plate, which is formed with an arm, as at H, and pivoted to a point on the main frame, so that said jaw may vibrate up and down into the cup. Upon the back of said metal portion of the jaw is a link, as at K, one end of which is pivoted to the jaw, as shown at Fig. 1, and the other end is pivoted to a point on the working-lever F′, which is supported in a bracket-arm that is attached to the main frame. The relative position of the two attachments or pivots in the working-lever is such that the upper end of the connecting-link travels in the arc of a circle, and therefore there is a compound motion that operates as a toggle-lever, by which the moving jaw is forced down with any desired force to squeeze the lemon.

At the lower end of the link K is a slotted hole to allow the end to press down upon a spring or block of rubber in the back of the jaw, as at H′, to prevent the breakage of the parts by using the toggle-lever mechanism. At M is shown a cap or hood which covers the cup and the working jaw when they are in operation to prevent the juice from being thrown out of the cup, and thereby wasted. Said hood is attached by an arm which is pivoted at one end to the upright bracket, and thereby holds it in proper working position on the cup and around the moving jaw, and it is carried up out of the way by the rising of the jaw, and then is let down with it, and is also forced down by a spring, as at N, one end of which is secured to the upright bracket, and the other end rests upon the arm of the hood, as shown at Fig. 1. The hood, being made much deeper than the jaw is thick, closes upon the cap before the jaw begins to compress the lemon to a sufficient degree to expel the juice from it, so that all the juice is thereby confined with the cup and passes through its perforated bot-

tom, which also serves as a strainer to separate the coarser portions of the pulp and seeds from the juice.

At O on the under side of the frame, and below the cup where the lemon is held, is placed a second cup of a funnel shape, which has two functions: first, it serves as a support to a second strainer of closer meshes than the holes in the upper cup; and, second, it also furnishes a funnel, as at P, by which the juice may be conducted directly into a bottle, if desired. Said funnel-shaped cup is pivoted at one side to the main frame to allow it to swing around out of the way, if desired, and also to remove the second strainer, as at R, and clean it when required. This second strainer is made of wire-gauze or perforated sheet metal, and is simply laid upon the rim of the funnel, as shown at Fig. 2, and is provided with a handle, as at S in Fig. 2. The opposite side of the funnel from the pivot is supported by a lug or projection upon its side, which slides on a hook on the front edge of the frame, as at T. At U is shown a shelf or disk for holding a vessel of any kind in proper position under the funnel or the jaws, and it is supported on a rod which extends up through a hole in the frame, and is made adjustable by set-screws, as at W.

Such a construction of squeezers for lemons, &c., makes them peculiarly well adapted for doing the work very rapidly, as the lemons may be introduced without the trouble of cutting them or left whole, and then the power may be applied to any required extent.

I am aware that a cutter has been used in combination with such articles before, and therefore do not make any claim, broadly, for it; but

I do desire to claim—

1. The combination, in a lemon-squeezer, of the frame A, having the cup C, the movable follower G, having the arm H pivoted at one end to the frame A, and the link K connected at one end to the follower and at the other end with the pivoted lever F′, all substantially as and for the object specified.

2. The combination of the follower G, provided with the spring H′ in its back, and the link K, pivoted to the follower at one end, resting on said spring, and connected at its other end with the lever F′, substantially as shown and described.

3. The hood M, having an arm pivoted at its end to the frame A, and operated upon by a spring, N, for the purpose described, in combination with the cup C, follower G, link K, and operating lever F′, substantially as described, the said hood being independent of the follower, as shown.

4. The combination, substantially as described, with a lemon-squeezer, of the shelf U, arranged beneath the cup of the squeezer and adjustably connected with the frame of the same, substantially as and for the object specified.

EDWARD M. SAMMIS.

Attest:

BOYD ELIOT,

JOHN W. RIPLEY.

1,250 mar. do.