

(No Model.)

2 Sheets—Sheet 1.

D. LILLE.  
FRUIT PRESS.

No. 299,815.

Patented June 3, 1884.

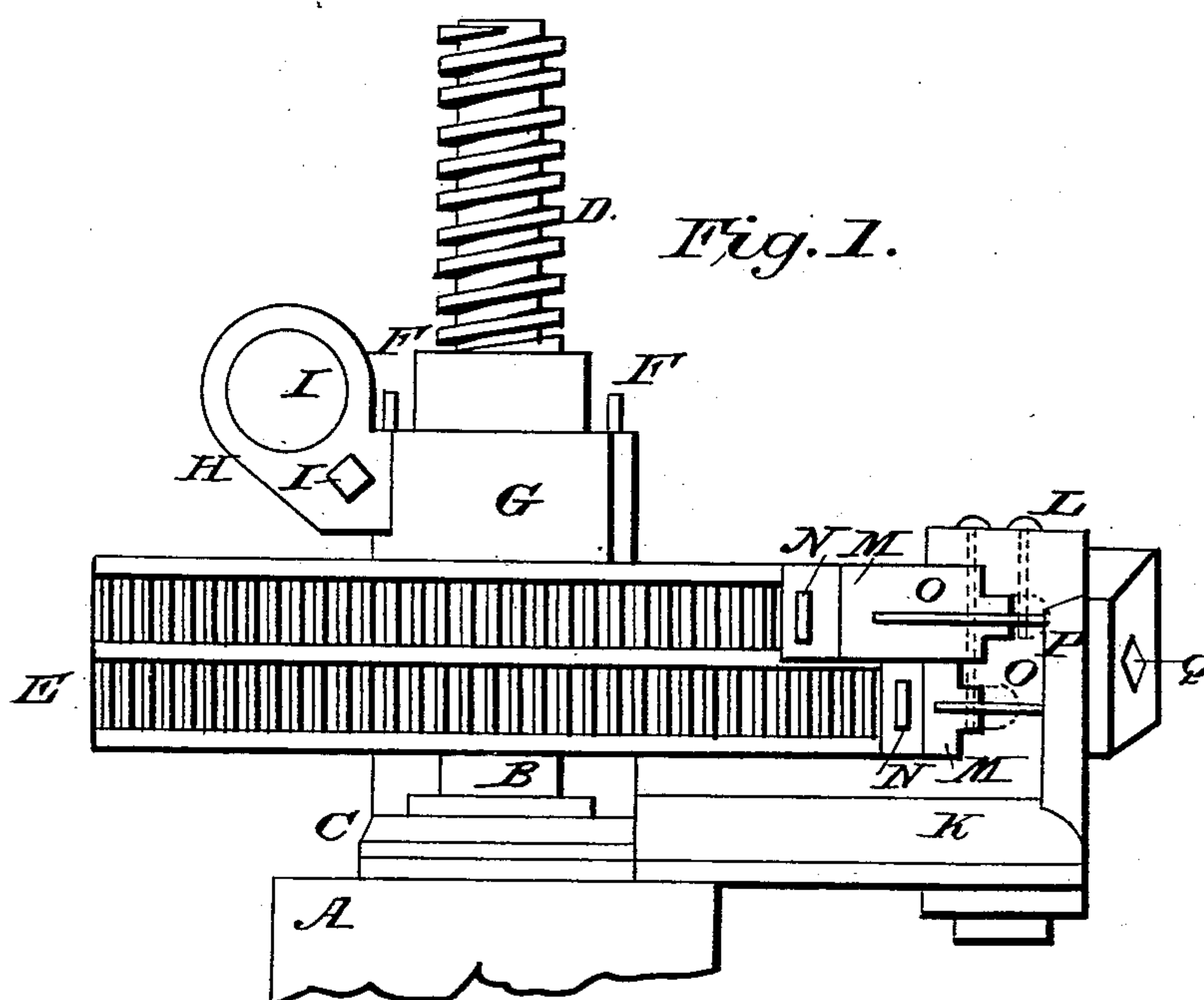


Fig. 1.

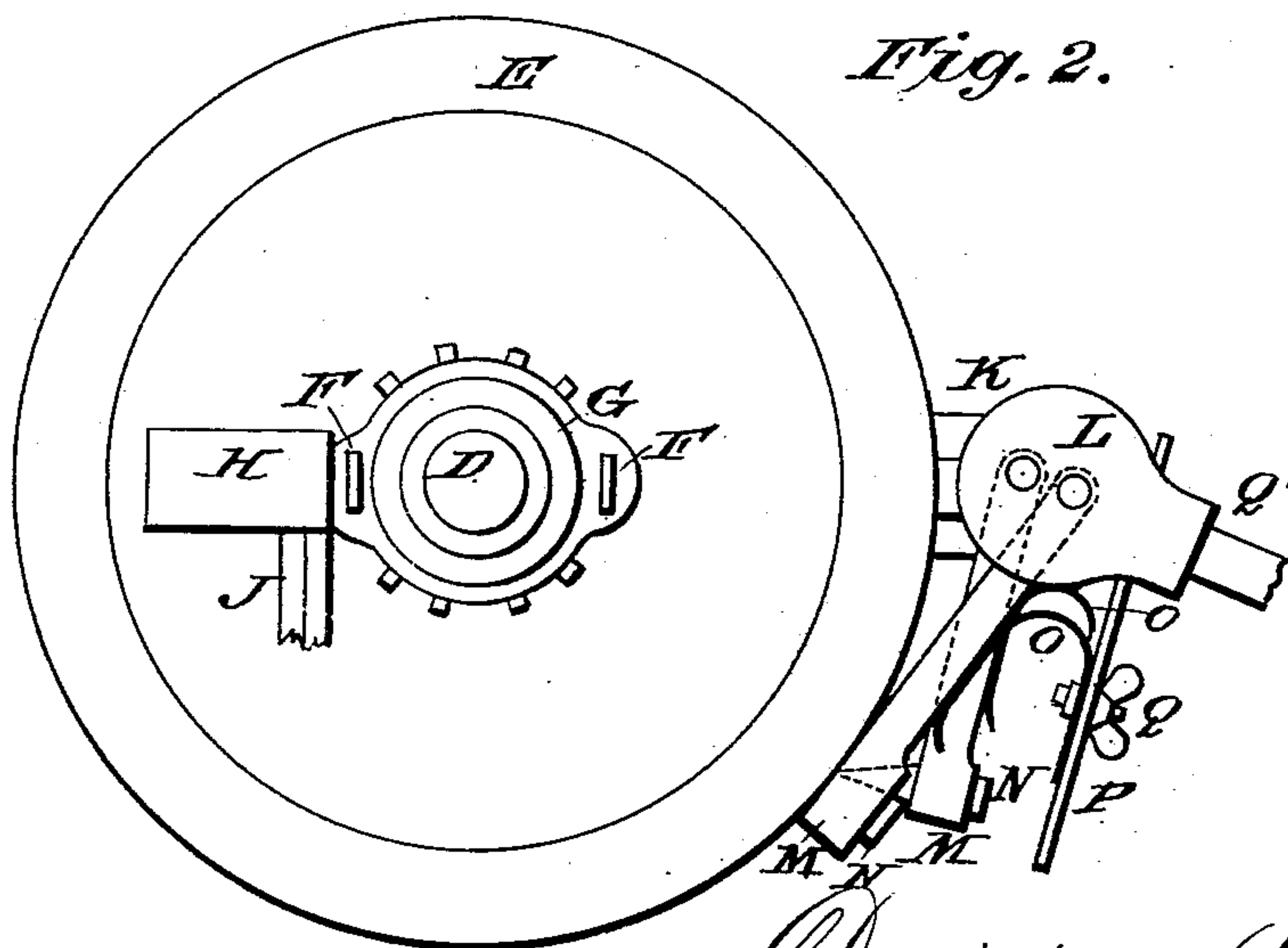


Fig. 2.

WITNESSES:

*Ed. L. Dittlerich*  
*Inspector*

*Dominique Lille*  
INVENTOR.

By *Louis Baggett & Co.*  
ATTORNEYS.

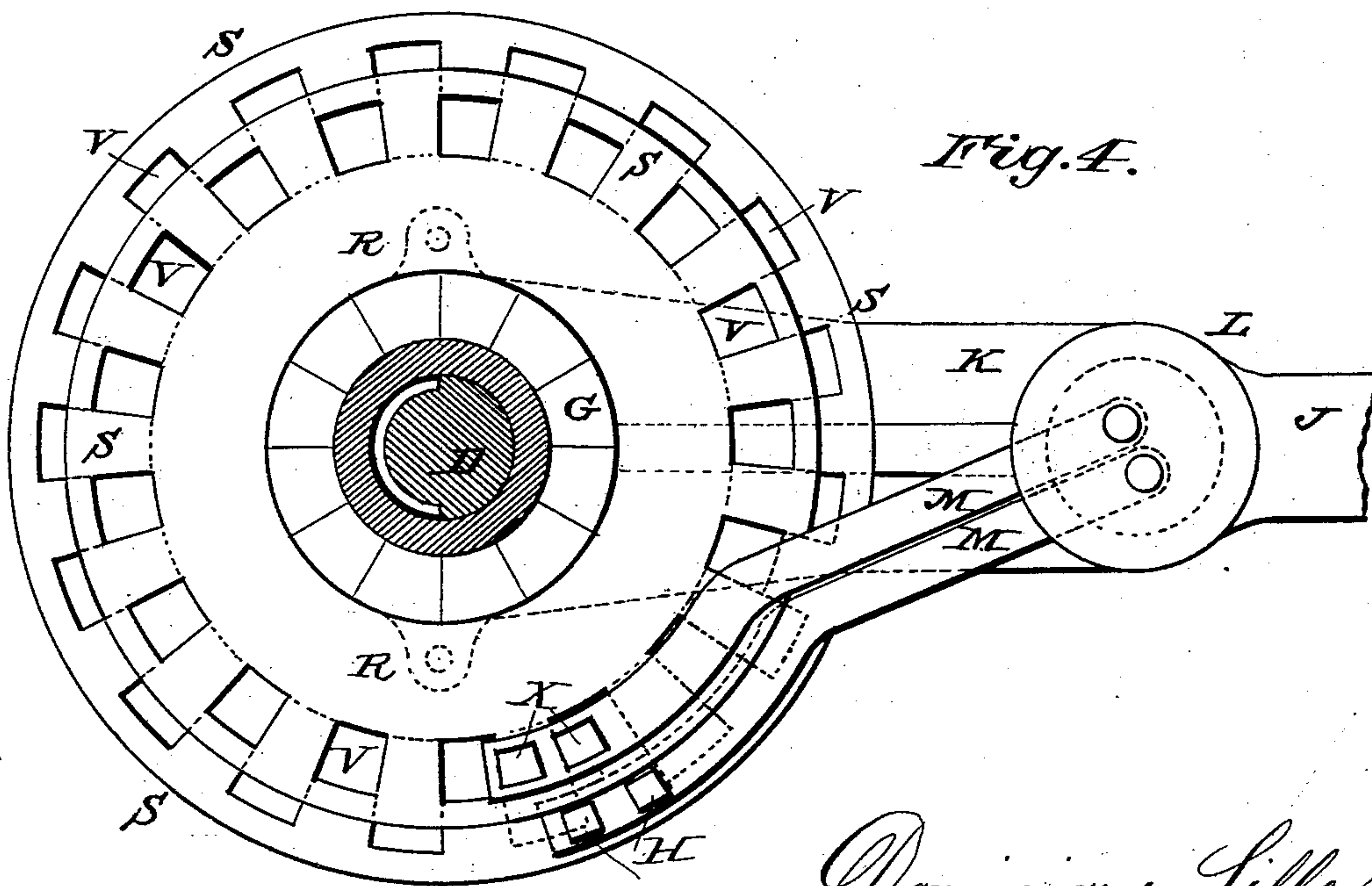
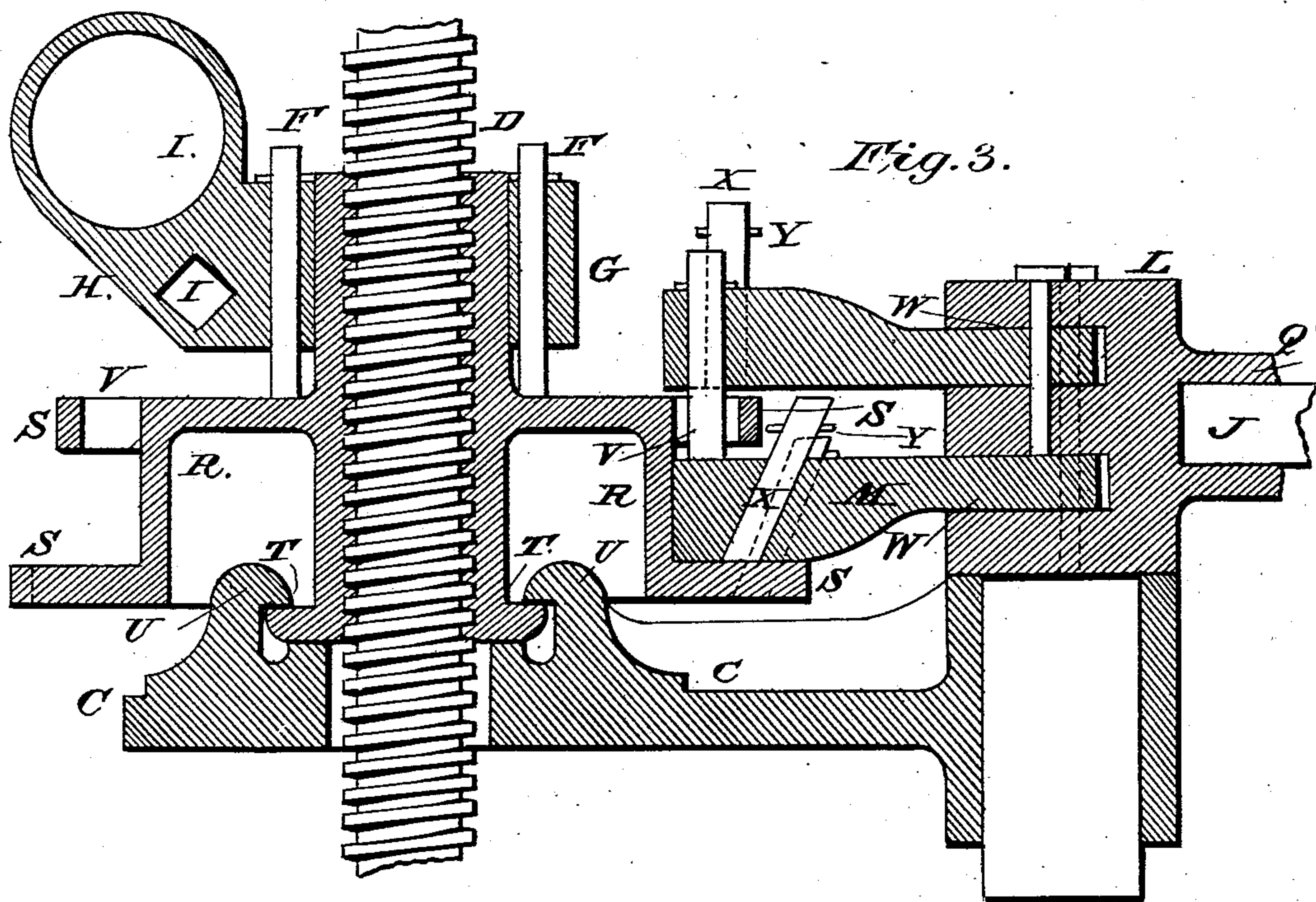
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2 Sheets—Sheet 2.

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FRUIT PRESS.

No. 299,815.

Patented June 3, 1884.



WITNESSES:

*Ed. G. Dütterich*  
*Wm. Secher*

*Dominique Lille*  
INVENTOR.

By *Louis Bagger & Co.*  
ATTORNEYS.



# UNITED STATES PATENT OFFICE.

DOMINIQUE LILLE, OF TRONCENS, FRANCE.

## FRUIT-PRESS.

SPECIFICATION forming part of Letters Patent No. 299,815, dated June 3, 1884.

Application filed April 7, 1884. (No model.) Patented in France May 21, 1883, No. 155,620; in Belgium October 6, 1883, No. 62,807; in England October 11, 1883, No. 4,841; in Luxemburg October 14, 1883, No. 310; in Sweden October 15, 1883; in Italy October 18, 1883, No. 16,021; in Denmark October 22, 1883, and in Norway November 10, 1883.

*To all whom it may concern:*

Be it known that I, DOMINIQUE LILLE, a citizen of the Republic of France, and a resident of Troncens, in the Department of Gers, France, have invented a certain new and useful Improvement in Fruit-Presses, of which the following is a specification, reference being had to the accompanying two sheets of drawings, which form a part of the same, and in which—

Figure 1 is a side view of the upper part of a fruit-press embodying my invention. Fig. 2 is a top view of the same. Fig. 3 is a vertical sectional view of the upper part of a press comprising a modification of my invention, and Fig. 4 is a top view of the latter.

The same letters refer to the same parts in all the figures.

This invention relates to fruit-presses; and it has for its object to provide a device which shall possess superior advantages in point of simplicity, durability, and general efficiency, and in which provision is made whereby, at first, when comparatively slight pressure is required or when the follower is to be raised, this may be done at a greater rate of speed than when heavy pressure is required, in which latter case the speed is diminished and the power increased.

To these ends the invention consists in the improved construction and arrangement of parts which will be hereinafter fully described, and particularly pointed out in the claims.

Referring to the drawings hereto annexed, A designates the upper portion of the press-box, and B is the follower-stem, which passes through the cover C. The upper end of the stem B is screw-threaded, as at D.

Resting upon the cover C, and connected thereto in any suitable manner which will permit it to revolve freely, is a double spur or ratchet wheel, E, having an interior thread that engages the threaded portion of the follower-stem. Placed upon the wheel E, and connected thereto by means of keys F, is a likewise screw-threaded collar, G, having a laterally-extending arm, H, provided with one or more openings, I, into any one of which an operating lever or sweep J may be inserted.

Extending laterally from the cover, or, if preferred, from the body of the press-box, is a suitably-constructed bracket, K, to the end of which a disk or block, L, is pivotally connected. Pivoted to the said disk on opposite sides of its pivoting-point are two levers, M, registering, respectively, with the upper and lower gearing of the wheel E, and provided at their ends with spurs or dogs N, engaging the teeth or ratchets of the said wheel, with which they are held in contact by the action of springs O bearing against the outer sides of the said levers, and secured adjustably to an arm or bracket, P, by means of a suitably-arranged tightening-screw, Q. The disk L has an opening, Q', to receive an operating-lever when required.

The operation of this device will be readily understood. When it is desired to raise the follower-stem, or when, at the start, it is desired to lower it with comparative rapidity, the lever or sweep is attached to the collar G, by revolving which the stem may be raised or lowered according to the direction of rotation; but when it is desired to increase the power at the expense of speed the sweep J is removed and placed in the opening Q' of disk L, to which an oscillating motion is then imparted. This will bring the dogs of the levers M M alternately into engagement with the double-gearred spur-wheel, to which great power is thus imparted. The arrangement of the springs will permit the requisite yielding motion to each lever.

The modification illustrated in Figs. 3 and 4 of the drawings relates mainly to the substitution for the spur or ratchet-wheel E of a wheel or disk, R, having flanges S at its upper and lower edges. The method of connecting this disk to the cover (I may here state that the wheel E, when used, may be connected to its cover in like manner) is shown in Fig. 3 of the drawings, by reference to which it will be seen that the hub of said disk has at its lower end an outward-extending flange, T, extending under a flange, U, of the cover, with which it is thus connected in such a manner as to be capable of revolving freely. The flanges S are provided near their peripheries with re-



cesses or perforations V, of which those in the upper flange alternate with those in the lower flange. The pivoted disk or block L is provided with recesses W W, in which are pivoted on opposite sides of the fulcrum the levers M M, which in this case are provided each, near their ends, with two upwardly sliding bolts or dogs, X X, having transverse pins Y at their upper ends to prevent their dropping out, and having their lower ends beveled, so that on the back movement of each lever the said bolts will be raised or lifted out of the recesses, thus enabling the disk to revolve and operating the screw. The operation of this modification will be obvious when reference is had to the description given above.

Having thus described my invention, I claim and desire to secure by Letters Patent of the United States—

1. In a fruit-press, the combination of the vertically-movable follower-stem having a screw-threaded upper end, a female-threaded disk or wheel connected with the cover of the press in such a manner as to be capable of revolving freely, a female-threaded collar placed upon and connected with the said disk, and having means, substantially as described, for the attachment of a sweep or lever, a fixed bracket having a pivoted disk, with means, substantially as described, for the attachment of an operating-lever, and a pair of levers pivoted to the said disk, on opposite sides of its fulcrum, and having means, substantially as described, for alternately engaging the wheel resting upon the cover of the press-box, substantially as set forth.

2. In a fruit-press, the combination of the screw-threaded follower-stem, the cover, the double spur-wheel resting upon and connected with the cover, a fixed bracket, a disk pivoted to the latter, and having means, substantially as described, for the attachment of a lever, a pair of levers pivoted in the said disk, on opposite sides of its fulcrum, and provided at their ends with spurs or dogs engaging the upper and lower gearing of the double spur-wheel, respectively, an arm or bracket, and springs attached to the latter and bearing against the outer sides of the levers, which are thereby held in engagement with the spur-wheel, substantially as and for the purpose herein set forth.

3. In a fruit-press, the combination of the cover, the screw-threaded follower-stem moving vertically through the same, an inturned flange formed annularly upon the cover, a female-threaded wheel or disk resting upon said cover, and having a flange extending under the flange of the latter, and the described mechanism for revolving the said wheel or disk with different degrees of speed and power, substantially as and for the purpose set forth.

In testimony that I claim the foregoing I have hereunto set my hand this 20th day of January, 1884.

DOMINIQUE LILLE.

Witnesses:

CANULLE CHARROPPIN,  
EMILE KANTER.