

(No Model.)

O. P. MORGAN.

POWER PRESS.

No. 272,303.

Patented Feb. 13, 1883.

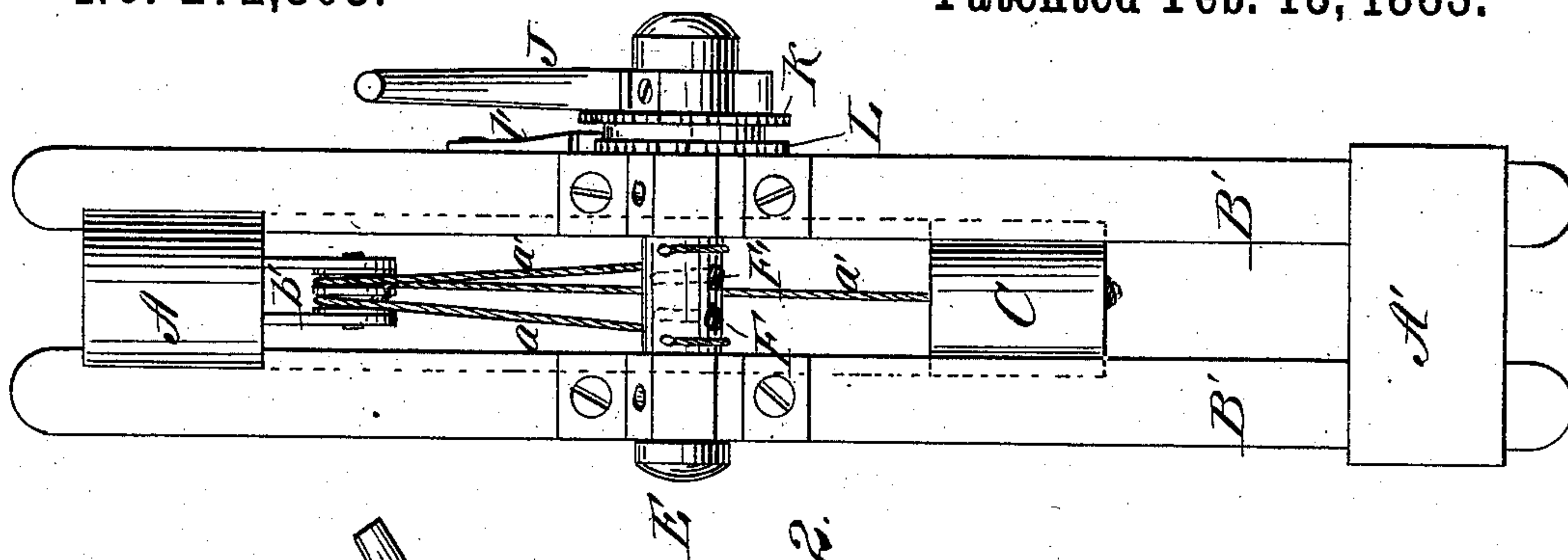


Fig. 2.

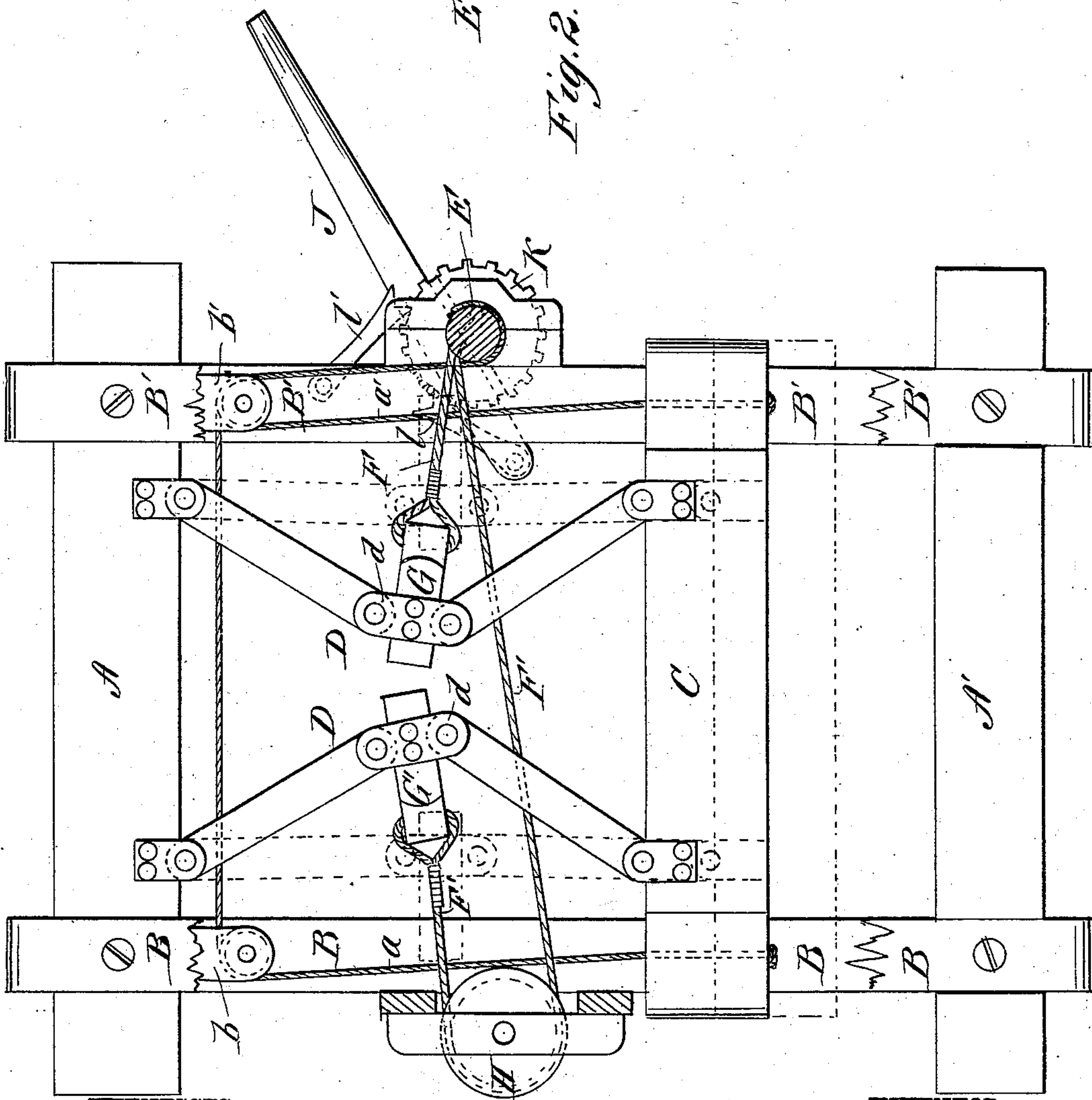


Fig. 1.

WITNESSES:

Donn Twitchell.
C. Sedgwick.

INVENTOR:

O. P. Morgan
BY *Munn & Co.*
ATTORNEYS.

UNITED STATES PATENT OFFICE.

OLIVER P. MORGAN, OF HAZELTON, MICHIGAN.

POWER-PRESS.

SPECIFICATION forming part of Letters Patent No. 272,303, dated February 13, 1883.

Application filed November 29, 1882. (No model.)

To all whom it may concern:

Be it known that I, OLIVER PERRY MORGAN, of Hazelton, in the county of Shiawassee and State of Michigan, have invented a new and useful Improvement in Power-Presses, of which the following is a full, clear, and exact description.

The object of my invention is to provide an improved press which shall be cheap, simple, quickly and easily operated, and not liable to get out of order, the press being more especially intended for pressing cider and cheese.

Reference is to be had to the accompanying drawings, forming part of this specification, in which similar letters of reference indicate corresponding parts in both the figures.

Figure 1 is a broken sectional elevation of my new and improved press, and Fig. 2 is a side elevation of the same.

The frame of the press is composed of the upper beam, A, and the lower beam or platen, A', and the two pairs of bars B B and B' B', which tie the beams A A' together. C is the follower of the press. It is placed between the bars B B and B' B', as shown in Fig. 2, and is adapted to be moved toward the beam or platen A', for pressing by straightening out the toggle-levers D D, that are pivoted to it and to the beam A above, as shown in Fig. 1. This straightening out of the toggle-levers D D for pressing is accomplished by means of the winding-shaft E, that is journaled between suitable pillow-blocks and cap-plates bolted to the outside of the bars B' B', and the ropes F F', that are attached to the shaft and to the blocks G G', respectively, which blocks are secured between the plates d d, (four in number,) that join together the adjacent ends of the parts of the toggle-levers. The rope F', before being attached to the shaft E, is passed over the pulley H, journaled in suitable blocks attached to the outside of the bars B B, so that it will give the proper outward movement to the toggle-lever to which it is attached when the shaft E is turned. The follower C is raised or moved away from the platen A' by means of the ropes a and a', that are attached to the follower near its ends and pass respectively over the pulleys b and b', secured to the under side of the beam A; thence around the winding-shaft E, but in the opposite direction to that of the ropes F F'. The shaft E is adapted to be revolved in either direction for alternately winding up and unwinding the ropes F F' and a a', for lowering and

raising the follower, by means of the lever J, that is fulcrumed on the shaft, the notched wheel K, that is secured upon the shaft, and the crotched pawl l, pivoted to the head of the lever, the pawl being reversible for engaging with the notches of the wheel K, above or below the horizontal diametrical plane of the shaft, according to the desired direction of revolution, as will be understood from Fig. 1. The shaft is held against backward movement, while being turned by the lever, by means of the crotched reversible pawl l, pivoted to one of the posts, B', and the notched wheel L, secured upon the shaft E, as shown clearly in the drawings.

Thus constructed, the press is very simple and powerful, and is quickly and easily operated, and by attaching a weight to the lever the press is adapted to exert a continual pressure, thus making the press particularly adapted for pressing cheese.

Having thus described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. In a power-press, the combination, with the follower C, of the toggle-levers D D, ropes F F', pulley H, and winding-shaft E, substantially as and for the purposes described.

2. The plates d d and block G or G', combined to form a connection between the levers of each toggle and the winding-rope, as shown and described.

3. In a power-press, the winding-shaft E, in combination with the follower C, toggle-levers D D, pulleys H and b b', and the ropes F F' and a a', substantially as described.

4. The pulley H, combined with the rope F', to form a connection between the block G' and the shaft E, as shown and described.

5. The combination, with the ropes F F', winding shaft E, and follower C, of the toggle-levers D D, provided with the blocks G G', to which the ropes are attached, substantially as described.

6. The press herein shown and described, consisting of the follower C, toggle-levers D D, pulleys H b b', winding-shaft E, ropes F F' and a a', the lever J, reversible pawls l l', and the notched wheels K L, substantially as described.

OLIVER PERRY MORGAN.

Witnesses:

NATHAN COLBY,

LEO REKART,

SAML. C. CHRISTIAN.