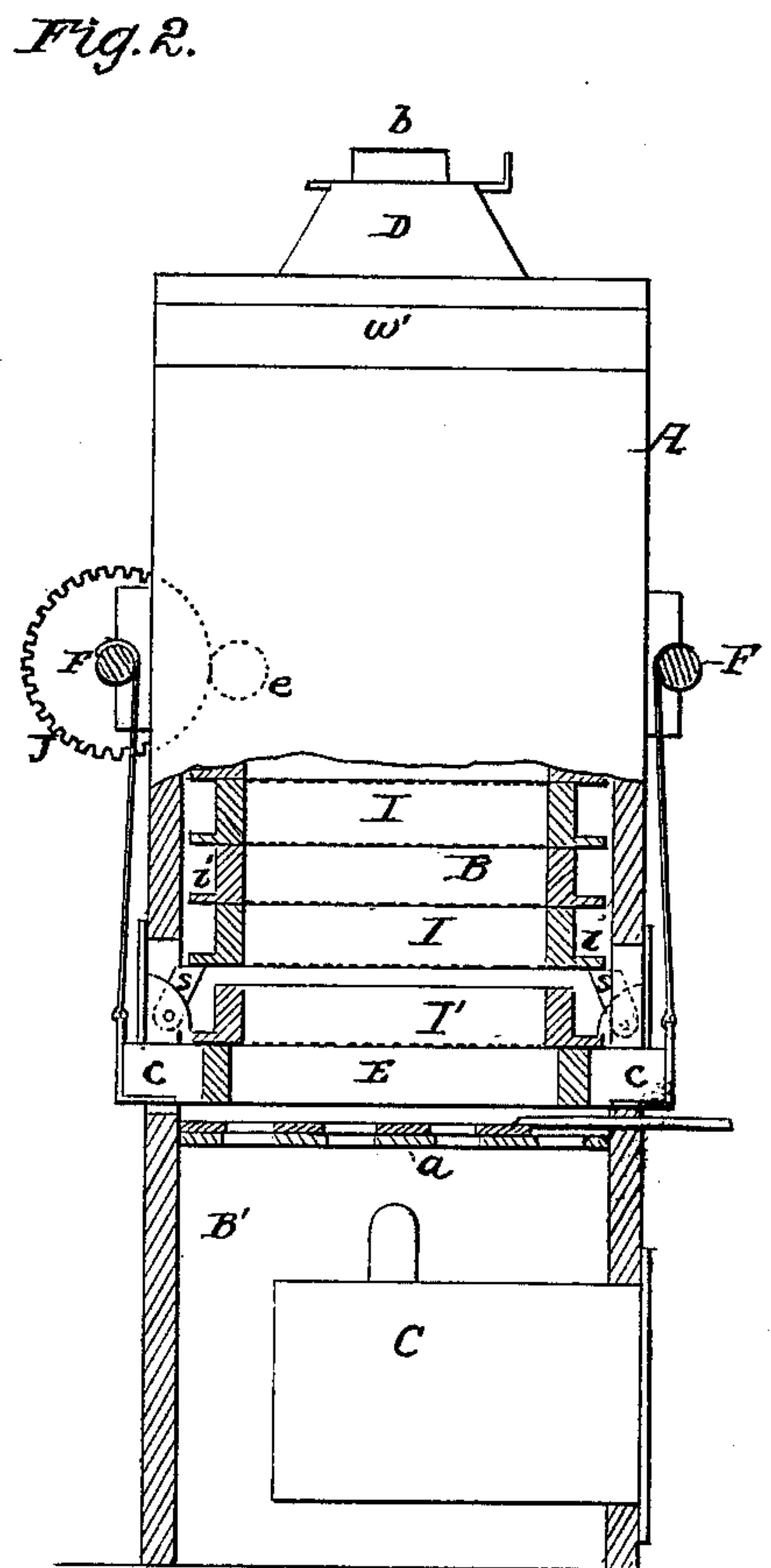
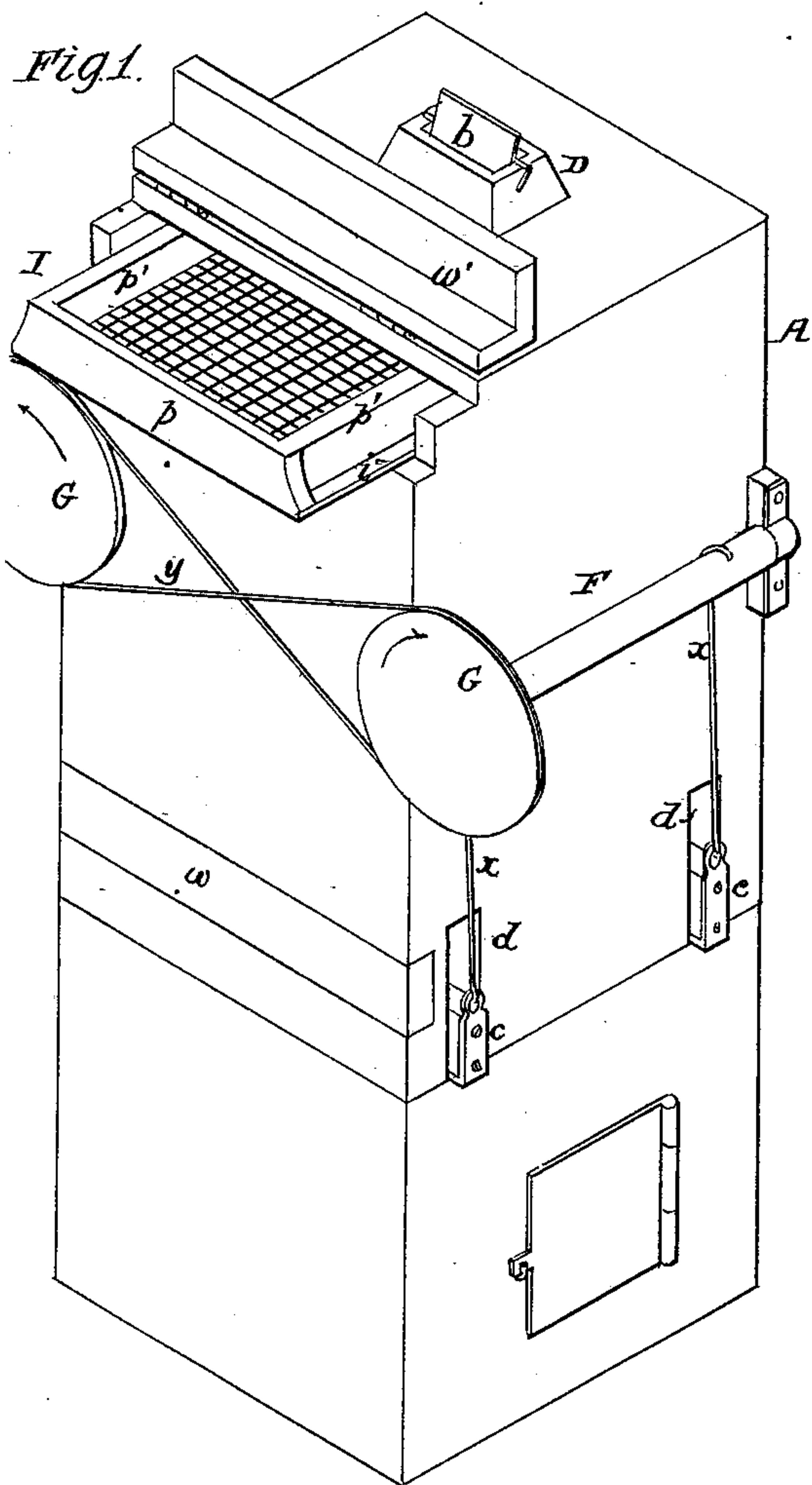


J. L. ROGERS & J. A. TUTTLE.
Fruit-Driers.

No. 206,618.

Patented July 30, 1878.



Attest:

Fred Bissamun.
E. A. Melch.

Inventor

James L. Rogers
Joseph A. Tuttle
By their atty
Charles E. Foster

UNITED STATES PATENT OFFICE.

JAMES L. ROGERS AND JOSEPH A. TUTTLE, OF ATLANTA, GA., ASSIGNORS
TO SAID ROGERS, GEORGE W. D. COOK, AND FRED. S. STEWARD, OF
SAME PLACE.

IMPROVEMENT IN FRUIT-DRIERS.

Specification forming part of Letters Patent No. **206,618**, dated July 30, 1878; application filed
December 6, 1877.

To all whom it may concern:

Be it known that we, JAMES L. ROGERS and JOSEPH A. TUTTLE, of Atlanta, in the county of Fulton and State of Georgia, have invented an Improved Fruit-Drier, of which the following is the specification:

Our invention relates to that class of fruit-driers in which a column of trays carried vertically upward above a fire-place supports the fruit; and the object of the invention is to simplify the construction of the apparatus, reduce its cost, and increase its efficiency.

In the accompanying drawing, Figure 1 is a perspective elevation of a fruit-drier, showing the improvements; and Fig. 2 is a front elevation, partly in section.

The casing A of the apparatus is rectangular in form, and is divided by a horizontal register, *a*, into two chambers, B B', the lower of which contains a heater, C, while the upper is surmounted by a chimney, D, provided with a damper, *b*. Within the chamber B' is a frame, E, arms *c* of which project through slots *d* in the casing, each arm being connected by a rope or chain, *x*, to a drum or roller, F, turning in bearings at the side of the casing.

At the inner sides of the casing, above the frame E, are hung latches *s*, two at each side, so arranged as to fall forward to the position shown in Fig. 2, to sustain the tray I, which rests upon them. Each tray consists of front and back pieces *p* and cross-pieces *p'*, having at their lower edges side flanges *i*, which press back the latches *s* when the tray ascends in the casing, each latch falling forward by its own weight as the tray passes above the same.

On the end of each roller F is a grooved pulley, G, and around both passes an endless cross-band, *y*. On the opposite end of one of the rollers is a cog-wheel, J, gearing with a pinion, *e*, which is turned by means of a crank, so as to impart rotation to both rollers in opposite directions.

The upward movement of the trays is ef-

fectured as follows: The frame E being brought to its lower position, a door, *w*, in the casing above said frame is opened to introduce a tray, I', which is passed inward and placed upon the top of the frame in the position shown in Fig. 2. The door is then closed, and the rollers F F are turned to wind up the ropes or chains *x*, by which means the frame E is elevated within the chamber B'. As the flanges *i* strike the latches *s* the latter are thrown back, so as not to interfere with the upward movement of the tray, beneath which they fall forward after the tray has passed. The frame E is now lowered, bringing the tray upon the catches which support it, while the frame descends to a position to receive another tray. These operations are continued until the uppermost tray is opposite an upper door, *w'*, in the casing, through which the said tray is withdrawn, with its fruit, which has been thoroughly dried by the hot air passing upward from the heater and through the perforated bottoms of the trays.

It will be seen that the movements of the trays are effected by apparatus extremely simple in its construction, not liable to get out of order, but easily repaired if injured, and that the entire apparatus may be readily constructed without the aid of skilled workmen.

We claim as our invention—

The combination of the reciprocating frame E, having arms projecting through slots of the casing, and the rollers F F, geared together, chains *x*, connected to the rollers, and the projecting arms and latches *s*, all constructed, arranged, and operating as set forth.

In testimony whereof we have signed our names to this specification in the presence of two subscribing witnesses.

J. L. ROGERS.
J. A. TUTTLE.

Witnesses:

S. D. McCONNELL,
W. I. HEYWARD.