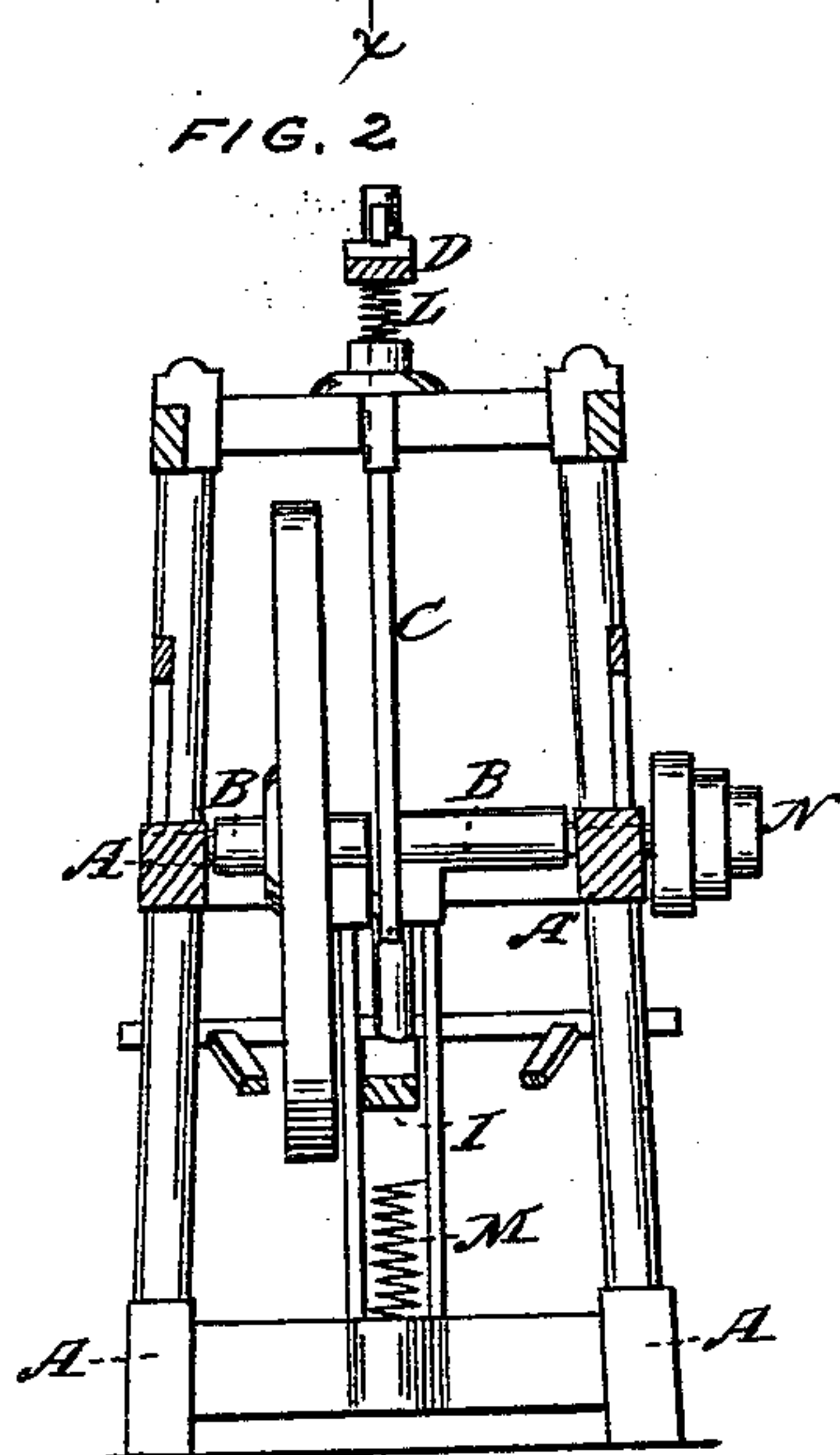
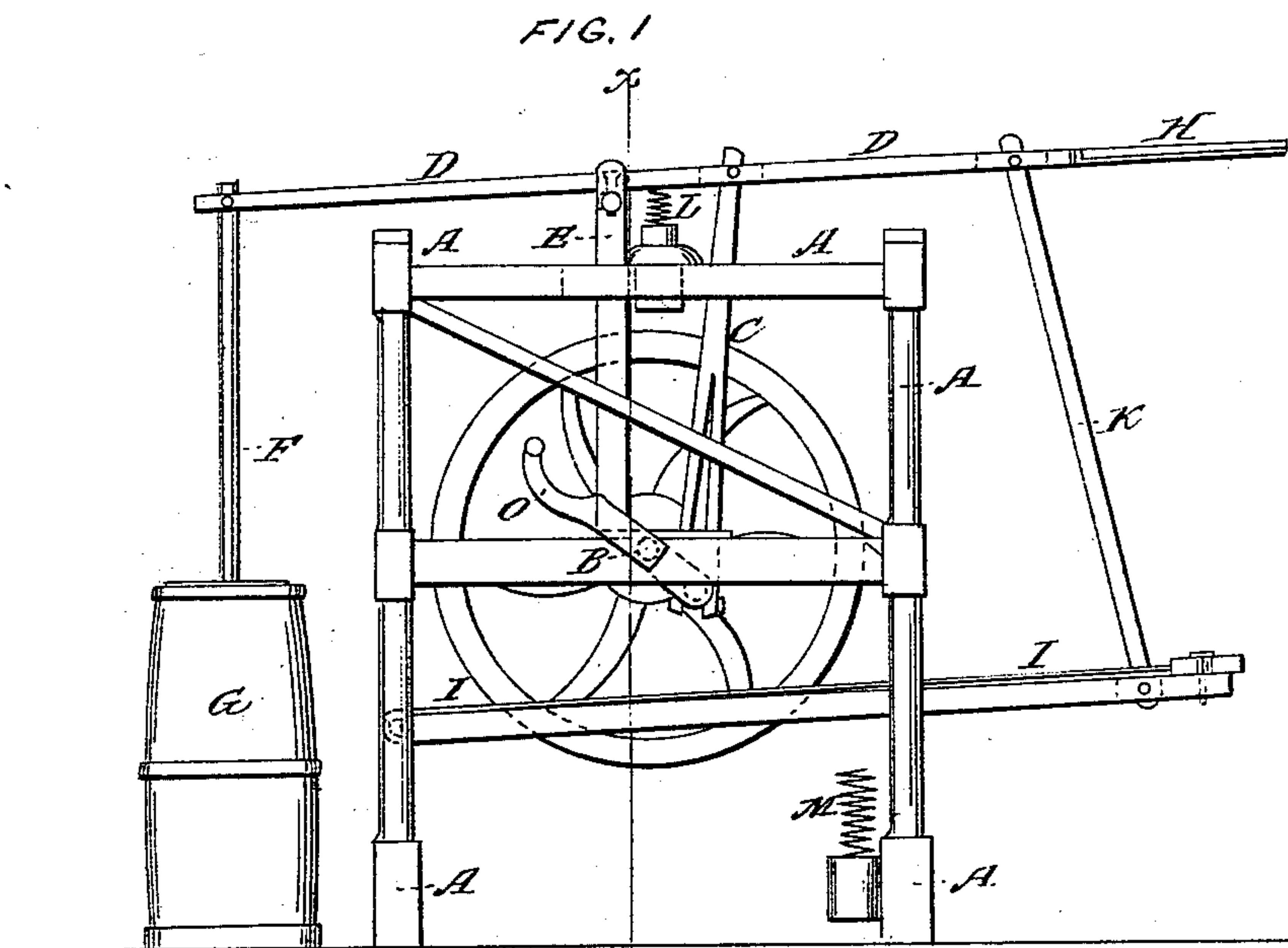


J. CHRISTLEY.

Churn.

No. 64,490.

Patented May 7, 1867.



WITNESSES:

Theo. Insehe  
Wm. Frewin

INVENTOR:

John Christley  
Per *Mumford*  
Attys

# United States Patent Office.

JOHN CHRISTLEY, OF SLIPPERY ROCK, PENNSYLVANIA.

*Letters Patent No. 64,490, dated May 7, 1867.*

## CHURN-POWER.

The Schedule referred to in these Letters Patent and making part of the same.

### TO ALL WHOM IT MAY CONCERN:

Be it known that I, JOHN CHRISTLEY, of Slippery Rock, in the county of Butler, and State of Pennsylvania, have invented a new and improved Churn-Power; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable others skilled in the art to make and use the same, reference being had to the accompanying drawings, forming part of this specification, in which—

Figure 1 is a side elevation of my improved churn-power.

Figure 2 is a vertical cross-section of the same, taken on the line *x x*, fig. 1.

Similar letters of reference indicate like parts.

This invention relates to a device for operating churns, either by hand or machine power, or by a treadle, so that it is adapted to the facilities as they may be at different localities. The invention consists in the combination, with the walking-beam, of a treadle, the latter being connected to the former by a pendulous arm, so that reciprocating motion can be imparted to the dasher-rod, which is attached to one end of the walking-beam, either by moving the opposite end of the beam up and down, or by operating the treadle, or by directly revolving the horizontal driving-shaft by means of a crank, or pulleys, or otherwise.

A represents a rectangular framework, made of wood or other suitable material, of sufficient strength to support all the other parts of the machine. In the same are arranged suitable bearings for a horizontal crank-shaft, B, as shown in the drawings. One end of a connecting-rod, C, is secured to the crank on shaft B, and the other end to a walking-beam D, that is pivoted to a bar, E, on top of frame A. To one end of the beam D is pivoted the dasher-rod F, to the lower end of which a dasher of suitable construction is attached, that works in a churn, G, of suitable construction. The other end of the beam D is provided with a handle, H. A treadle, I, pivoted in the lower part of the frame A, is connected with the beam D by a pendulous rod, K. Springs L and M are arranged on the frame A, below the bars D and I, respectively, so as to throw them up and help to overcome the dead-centre, and to facilitate the operation of the machine. The machine can be operated either by revolving the shaft B by a belt passing over a pulley, N, attached to one end of the shaft B, as shown in fig. 2, or by a crank, O, attached to the end of the shaft, as shown in fig. 1. The crank and pulley may be arranged so as to be detachable from the shaft. The machine may also be operated by means of the treadle I, or by directly oscillating the beam D by taking hold of the handle H.

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

The combination of the walking-beam D, handle H, vertical bar E, pendulum-rod K, treadle I, connecting-rod C, spring L M, dasher-rod F, and fly-wheel, substantially as described for the purpose specified.

JOHN CHRISTLEY.

Witnesses:

WM. H. H. UBER,  
D. M. McDONALD.