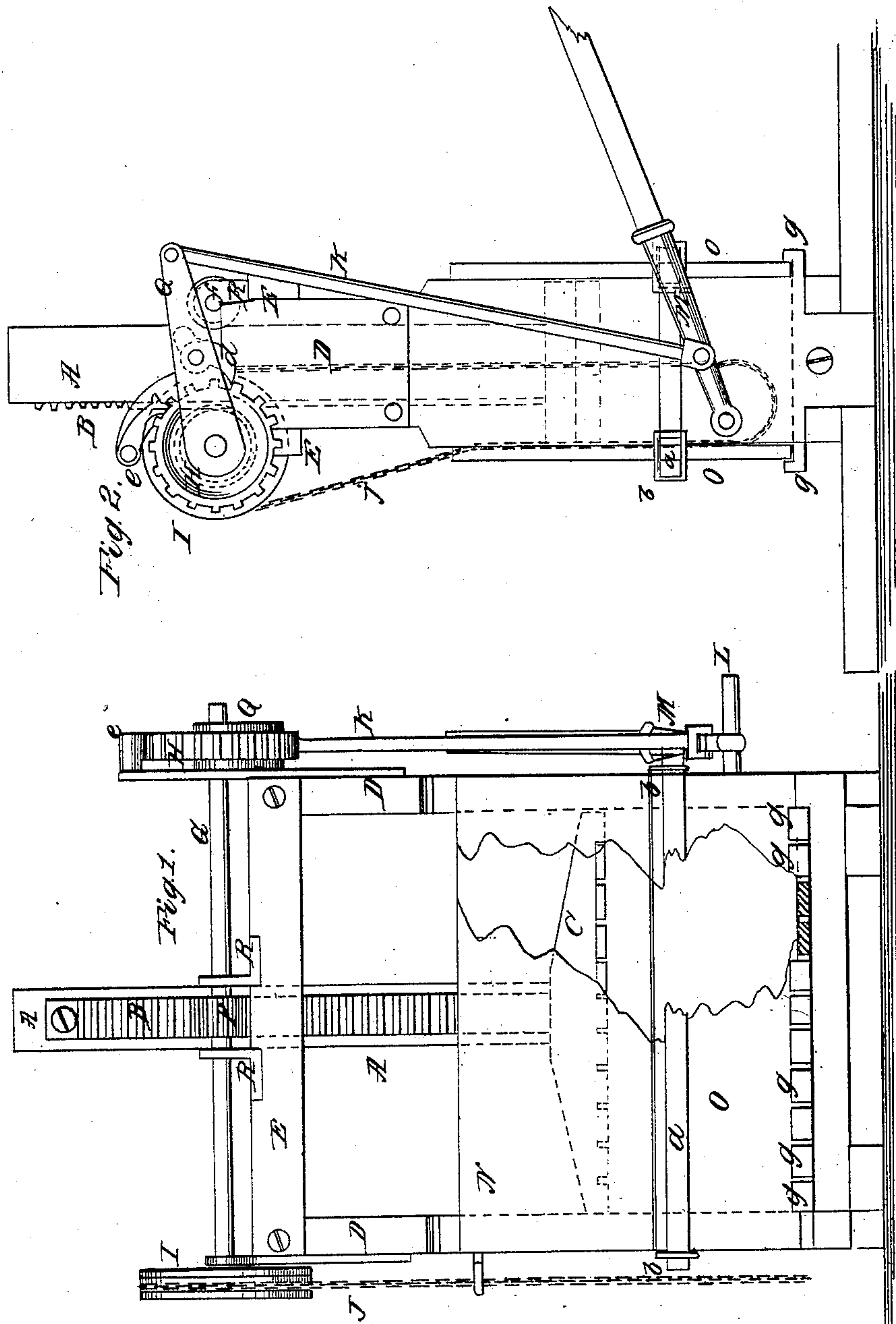


Tappan, Lumsden & Steel,

Cotton Press.

N^o 82,178.

Patented, Sep. 15, 1868.



Witnesses.
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WILLIAM H. TAPPEY, WILLIAM C. LUMSDEN, AND ALEXANDER STEEL,
OF PETERSBURG, VIRGINIA.

Letters Patent No. 82,178, dated September 15, 1868.

IMPROVED COTTON-PRESS.

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

TO ALL WHOM IT MAY CONCERN:

Be it known that we, WILLIAM H. TAPPEY, WILLIAM C. LUMSDEN, and ALEXANDER STEEL, of Petersburg, in the county of Dinwiddie, and State of Virginia, have invented a new and improved Cotton-Press; and we do hereby declare that the following is a full, clear, and exact description thereof, which will enable those skilled in the art to make and use the same, reference being had to the accompanying drawings, forming part of this specification.

The object of this invention is to provide a simple and effective machine for pressing cotton and other analogous matter into bales.

It consists in the application and arrangement of mechanism for operating the follow-block of the press.

In the accompanying drawings—

N is the box of the press, standing vertically, the wood uprights D forming the ends of said box, and affording support to the mechanism for actuating the follow-block C, which latter may be of any suitable construction.

A is a post or beam affixed centrally to the top of the follow-block, and is provided with a rack, B, which is engaged by a cog-wheel, P, on the shaft G.

This shaft has its bearings in the uprights D, and is revolved by means of the arm Q and its ratchet-pawl *d*, the said arm being a double arm, working loosely on the end of the shaft G, and provided with the pawl *d*, the trunnions of which have bearings in the said arms, as shown.

This pawl is so hung, with reference to its centre of gravity, that the free end will overbalance the nib-end, and thus keep the latter end in contact with the teeth of the ratchet-wheel H, which is keyed on the shaft G between the arms Q, as shown.

The arms Q are vibrated by means of a rod, K, which is pivoted to a lever, M, the fulcrum-point of which is the stud L, affixed to the end of the press.

A pawl, *e*, catches upon the teeth of the ratchet-wheel H, and holds it while the arm Q is raised to obtain another hold on the wheel.

A roller, *f*, serves to keep the rack B in proper engagement with the cog-wheel P, and both the roller and the cog-wheel have bearings in a metal plate, R, bolted across the top of the two cross-braces E E, which connect the uprights D.

This plate has a square opening, through which the follow-block beam moves up and down freely.

O O are the removable doors, which are held in place by the cross-bars *a*, affixed across them in the manner shown, the ends of the said cross-bars being held by metal loops, *b*, which are hinged to the box, and may be slipped off or on the ends of said bars, according as the doors are removed or secured in place.

The lower edges of the doors are held by the shoulders *g* on the bottom timbers of the press.

By vibrating the lever M, the ratchet-wheel H is turned, and, with it, the shaft G and cog-wheel P, thus actuating the beam A and follow-block C downward upon the cotton or other matter to be pressed.

The doors O O are then removed, the baling-ropes tied, the pawl *e* is freed, by taking strain with the lever M, and the said pawl turned over on its stud to hang in the reverse way.

The lever M is then slipped off from its fulcrum-stud L, and the pawl *d* reversed on its trunnions, when the rounded end of said pawl will rest against the teeth of the wheel H, and offer no obstruction to its backward revolution when the follow-block is being raised to permit the introduction of the cotton for the next bale.

The follow-block is raised by means of an endless chain, J, hanging on a grooved pulley, I, keyed on the shaft G.

We claim as new, and desire to secure by Letters Patent—

The shaft G, wheel P, rack B, wheel H, pawls *e* and *d*, double arms Q, rod *k*, lever M, and roller *f*, all arranged, constructed, and operated substantially as described, in combination with the follow-block C and beam A of an upright press, as set forth.

The above specification of our invention signed by us, this twenty-first day of May, 1868.

WM. H. TAPPEY,
WM. C. LUMSDEN,
ALEX'R STEEL.

Witnesses:

F. I. TAPPEY,
R. S. BROWN.