

(No Model.)

W. R. & N. J. GREEN.

BALING PRESS.

No. 362,272.

Patented May 3, 1887.

Fig. 1.

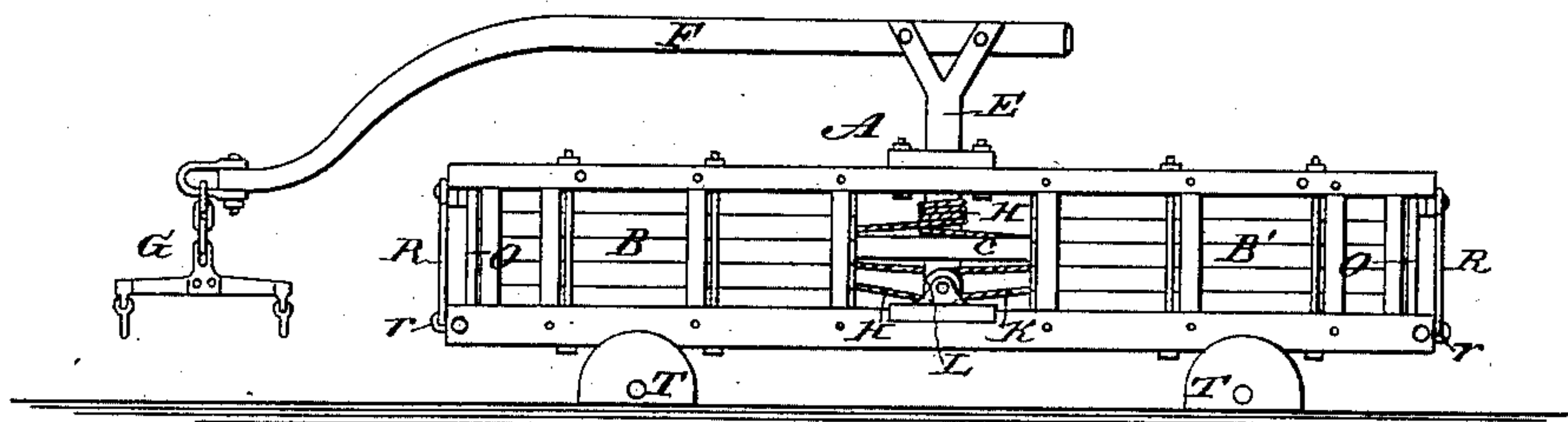


Fig. 2.

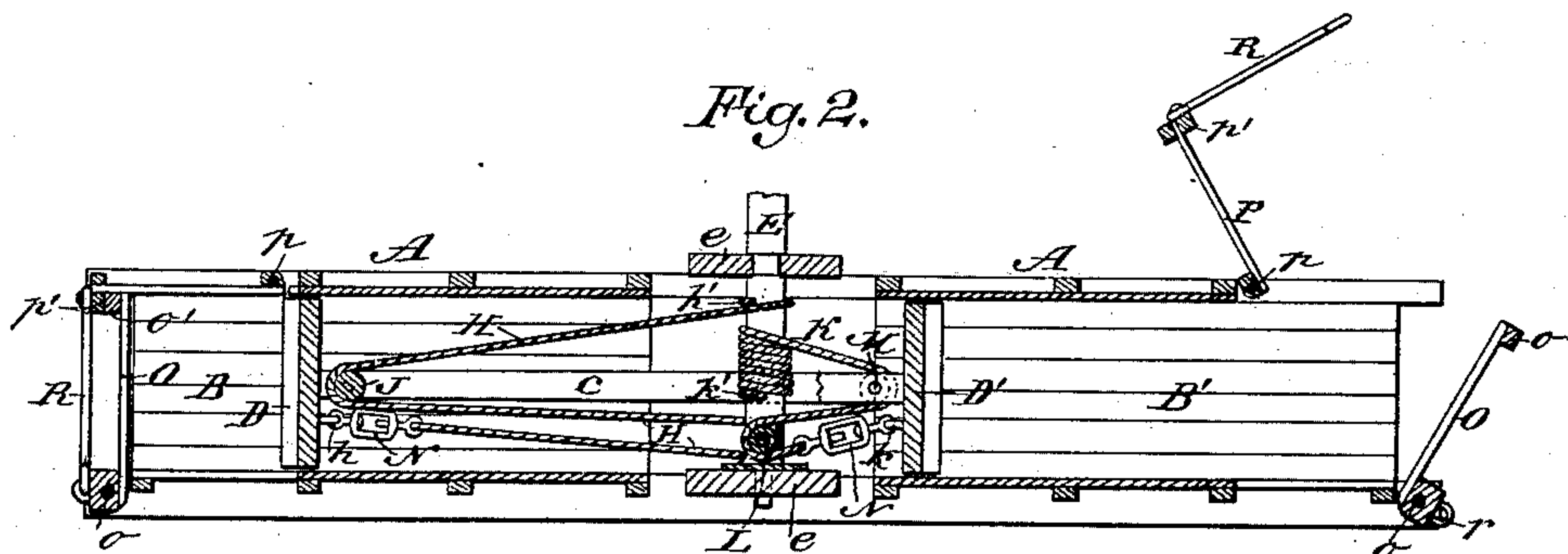


Fig. 3.

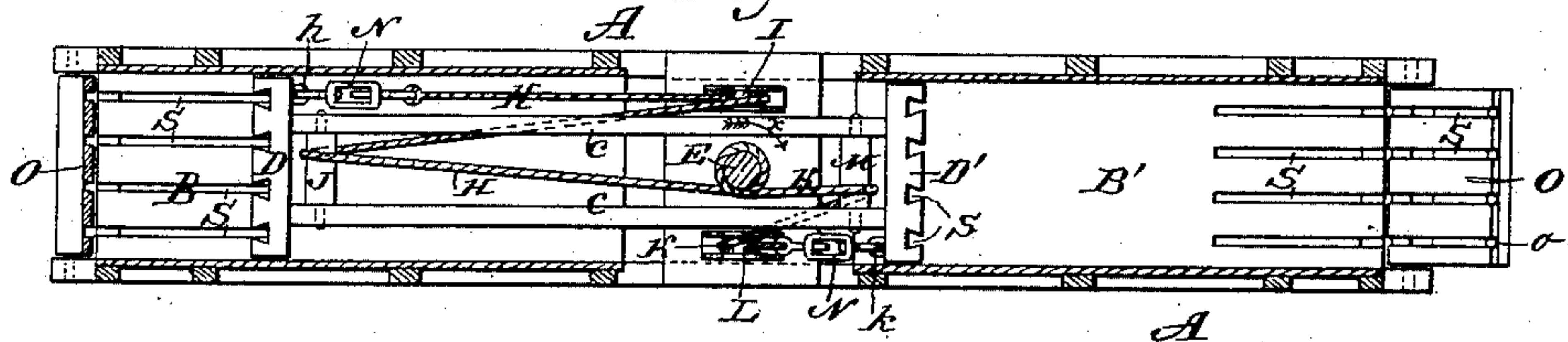
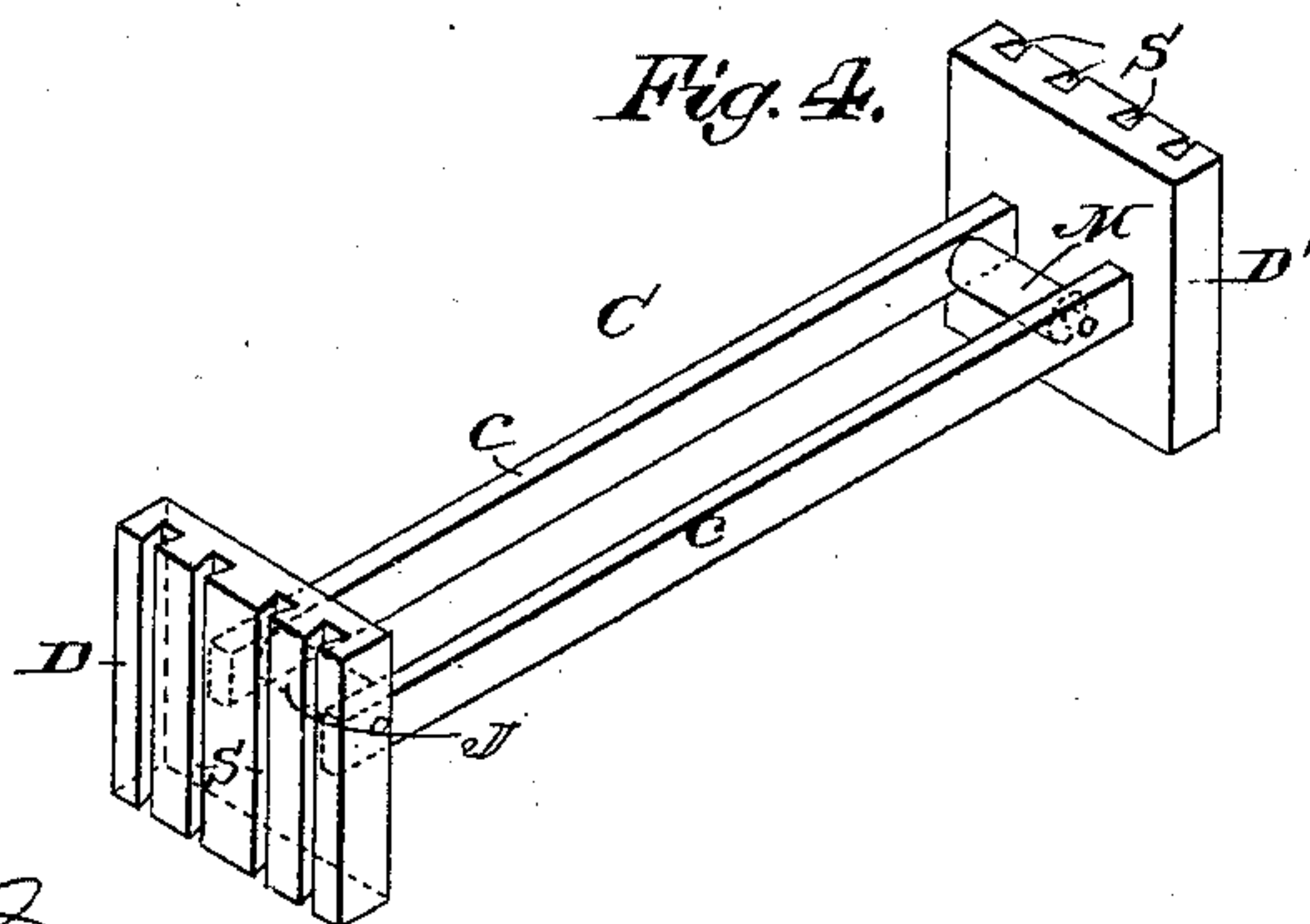


Fig. 4.



WITNESSES:

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UNITED STATES PATENT OFFICE.

WILLIAM R. GREEN AND NEWTON J. GREEN, OF KINGSTON, TEXAS.

BALING-PRESS.

SPECIFICATION forming part of Letters Patent No. 362,272, dated May 3, 1887.

Application filed September 2, 1886. Serial No. 212,457. (No model.)

To all whom it may concern:

Be it known that we, WILLIAM ROBERT GREEN and NEWTON JASPER GREEN, of Kingston, in the county of Hunt and State of Texas, have invented a new and Improved Baling-Press, of which the following is a full, clear, and exact description.

Our invention relates to presses adapted for pressing hay, straw, cotton, or other material into compact bales, and has for its object to provide an inexpensive, strong, and durable press of this character which may be operated effectively with economy of time and labor.

The invention consists in certain novel features of construction and combinations of parts of the baling press, all as hereinafter fully described and claimed.

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

Figure 1 is a side elevation of our improved baling-press. Fig. 2 is a vertical longitudinal sectional elevation of the press with the doors of one baling-chamber open. Fig. 3 is a sectional plan view of the press, and Fig. 4 is a perspective view of the double-acting follower of the press.

The press-case A is formed with two baling-chambers, B B', one at each end of the case and in alignment one with the other, and the follower C is made with two head-blocks, D D', connected by tie-bars c c, and adapted to work in the opposite baling-chambers, B B'.

At the center of the press-frame, and in suitable bearings, c c, fixed thereto, there is journaled the vertical power-shaft E, to the head of which is connected the inner end of a sweep, F, having a whiffletree, G, or other suitable draft-connections at its outer end to allow hitching a horse to the sweep for operating the press.

A rope, H, is connected at h at one end to the back of the follower head-block D, and thence runs to and around a pulley, I, journaled to the press-frame, and thence back again to and around a pulley, J, journaled to the follower, and preferably in the tie-bars c c, near the head-block D, and thence the rope H extends to the power-shaft E, to which it is connected at its other end, as at h'. A similar rope, K, is connected at one end at k to the

opposite head-block, D', of the follower, and thence passes to and around a pulley, L, journaled to the press-frame, and thence to and around a pulley, M, journaled to the follower-bars c c, next the head-block D', and thence the rope K extends to the power shaft E, to which its other end is connected, as at k'. If preferred, turn-buckles, as at N, may be connected in the follower-operating ropes H K, to provide for taking up the slack of the ropes; but any other suitable devices may be used for this purpose.

The outer end of each of the baling-chambers B B' is formed as a door, O, hinged at o at the base of the press-frame, and a portion of the top wall of each of the baling-chambers, at their outer ends, next the door O, is formed as a door, P, hinged at p at the top of the press-frame, and provided with a cross cleat or bar, p', which, when the doors O P are closed, stands outside of a cleat, o', on the end door as a brace to hold the end door securely closed against the pressure of the follower head-block against said door in forming the bale. A heavy hook, R, pivoted to the free end of the top door, P, may be hooked into an eye or staple, r, fixed to the hinged end of the end door, O, to lock the doors closed, as in Fig. 1 of the drawings.

The outer faces of the follower head-blocks D D', the floors of the chambers B B' next the doors O, and the doors O P are provided with grooves, as at S, to admit the wires or bands for tying out the bales, in the usual way.

The operation of the press is as follows: As the power-shaft E is turned in direction of the arrow x in Fig. 3 by the sweep F, the follower C will be moved to force the head-block D outward in the baling-chamber B and press the material which has been fed into said chamber against the closed doors O P at the end thereof, to form a bale by a single stroke of the follower, and when this bale is tied and discharged from the baling-chamber after the doors O P thereof are opened, and also after the other chamber, B', has been filled with hay or other substance to be baled, and the doors O P of said baling-chamber B' are closed, the motion of the sweep will be reversed, which will cause the follower to move in the opposite direction and force its head-block D' outward in the chamber B', to form a bale

against the closed doors of said chamber, and this bale will be tied and discharged, and the baling-chamber B will next be filled, and the motion of the sweep and power-shaft will again
 5 be reversed to form a bale in the chamber B, and so on, the successive bales being formed in the opposite chambers, B B', and each bale being pressed by a single movement or stroke of the plunger, requiring reversal of motion
 10 of the sweep but once for each bale made in the press.

It is obvious that as the rope K is wound on the power-shaft E to operate the follower for pressing a bale in the chamber B, the rope
 15 H will be unwound from the shaft, and while pressing a bale in the chamber B' the rope K will be unwound from the shaft as the rope H is wound on said shaft. The arrangement of the ropes H K, with their guide-rollers I J L
 20 M and the power-shaft E, gives a double purchase, forcing the follower in either direction with ample power to form very compact bales in the press case, and these power-connections to the follower allow ample back movement of
 25 the follower head-blocks in the baling-chambers to permit all the material for a bale to be fed into each bale-chamber to be pressed up into a bale by a single continuous stroke of the follower, instead of by successive increments,
 30 requiring several strokes of the follower and corresponding reversals of movement of the sweep; hence our press may be operated smoothly and effectively with economy of time and labor.

35 Chains or wire cables may be substituted for the ropes H K, if desired.

The press frame and case and operating mechanism may be mounted on wheeled trucks T T of any approved kind, and the wheels may be
 40 sunk in the ground, as in Fig. 1, or may be otherwise chocked to hold the press steadily in operative position.

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

1. A baling-press comprising a frame and case having aligned baling-chambers at opposite ends, a follower having two head-blocks working one in each of the baling-chambers, a shaft journaled between the baling-chambers,
 50 and two ropes connected at one end to the shaft and at their other ends to the opposite head-blocks, substantially as shown and described.

2. A baling-press comprising a frame and case having aligned baling-chambers B B' at opposite ends, a follower having head-blocks D D', working in the chambers B B', respectively, a shaft, E, journaled between the chambers, a rope, H, connected at opposite ends to
 60 the shaft and head-block D, respectively, a rope, K, connected at opposite ends to the shaft E and head-block D', respectively, and guides for the ropes H K, substantially as shown and described.

3. A baling-press comprising a frame and case having aligned baling-chambers B B', a follower, C, having head-blocks D D' working in the chambers B B', a power-shaft, E, adapted for operation by a sweep, a rope, H, connected
 70 at opposite ends to the shaft E and head-block D, respectively, guide-rollers I J, over which rope H passes, a rope, K, connected at opposite ends to the shaft E and head-block D', respectively, and guide-rollers L M, over which
 75 the rope K passes, substantially as shown and described.

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Witnesses:

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