

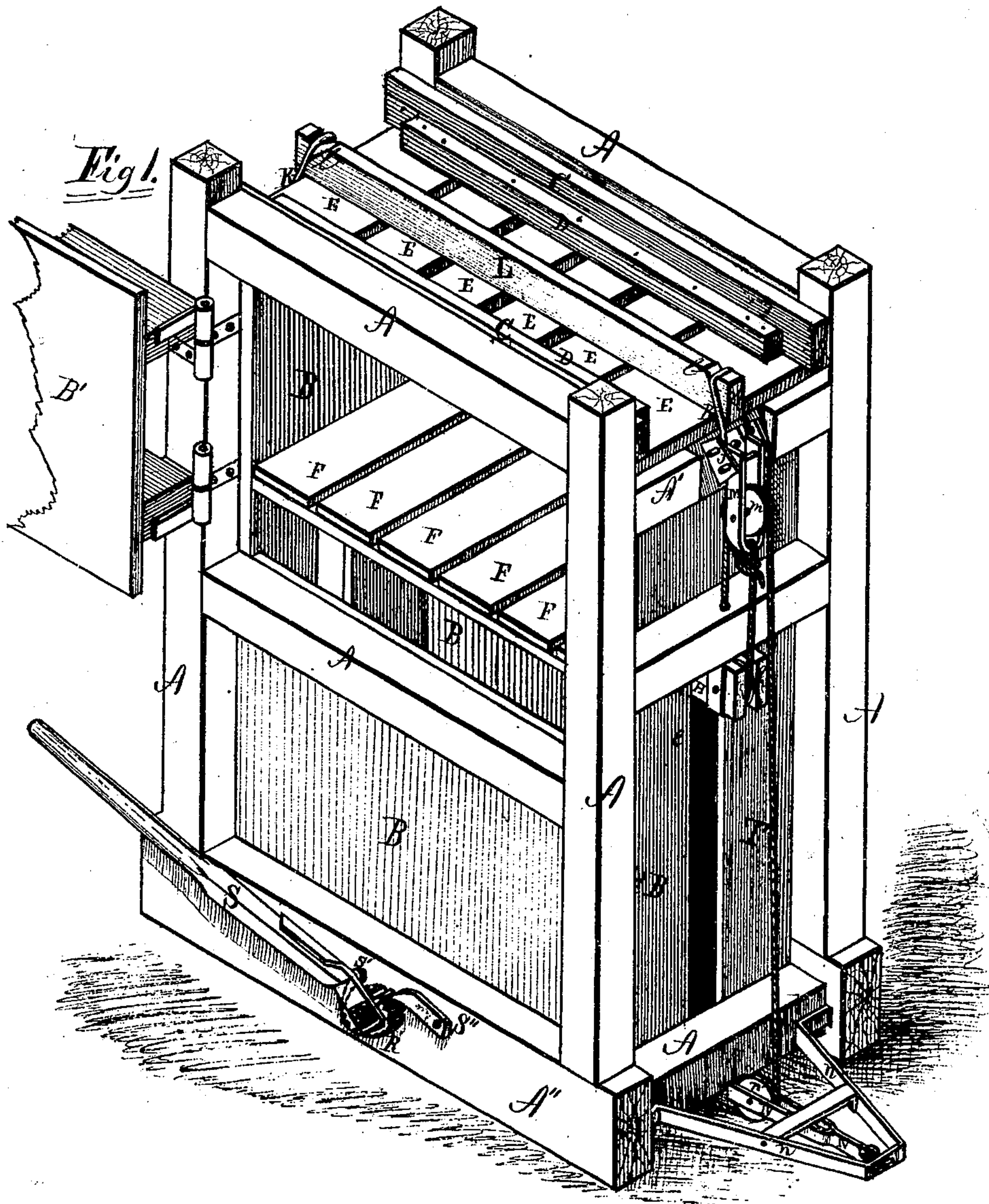
W. R. Newman,

2. Sheets. Sheet. 1.

Baling Press.

No. 10,9653.

Patented Nov. 29. 1870.



Witnesses:—

J. L. Palmer  
J. R. Richards,

Inventor,

W. R. Newman,  
his Atty.



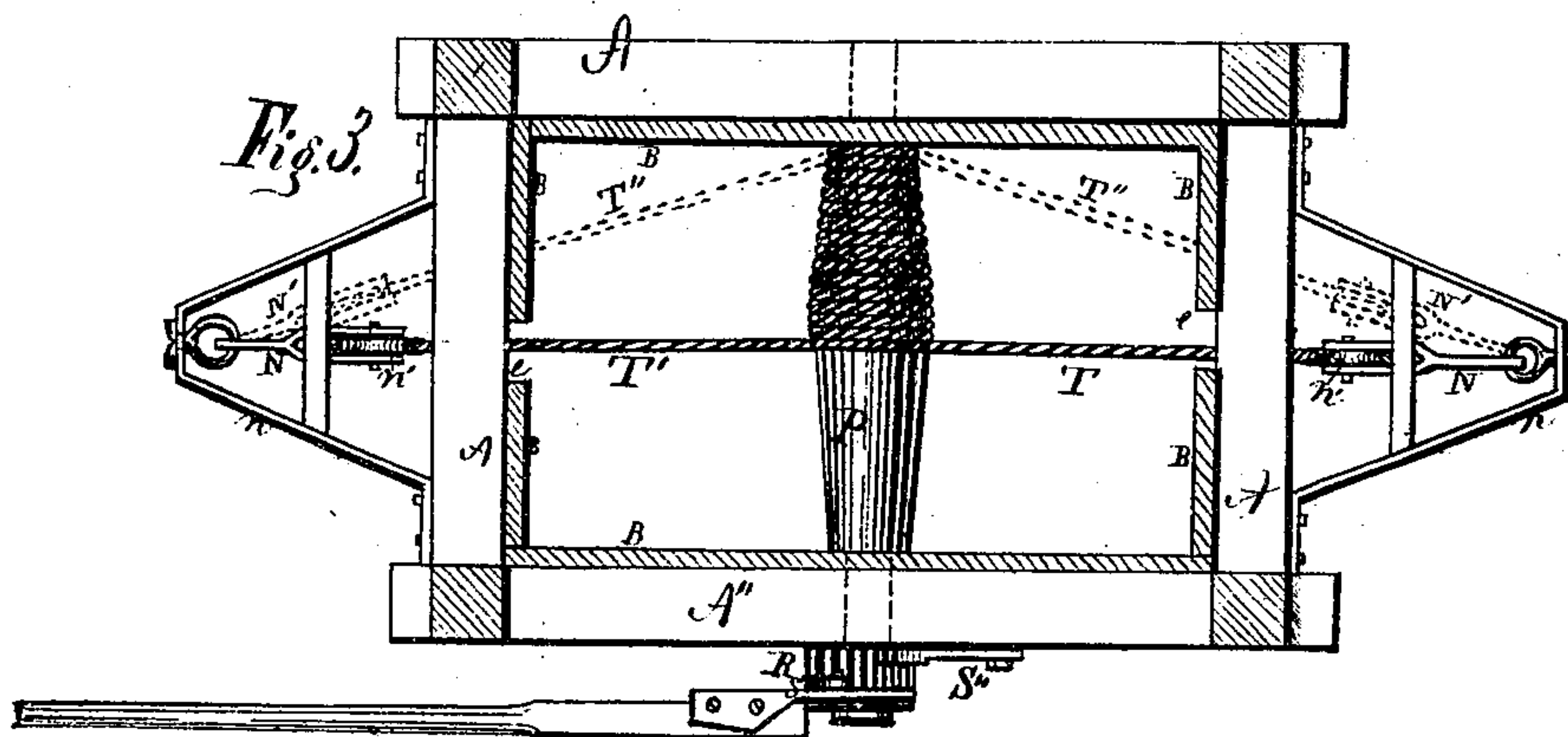
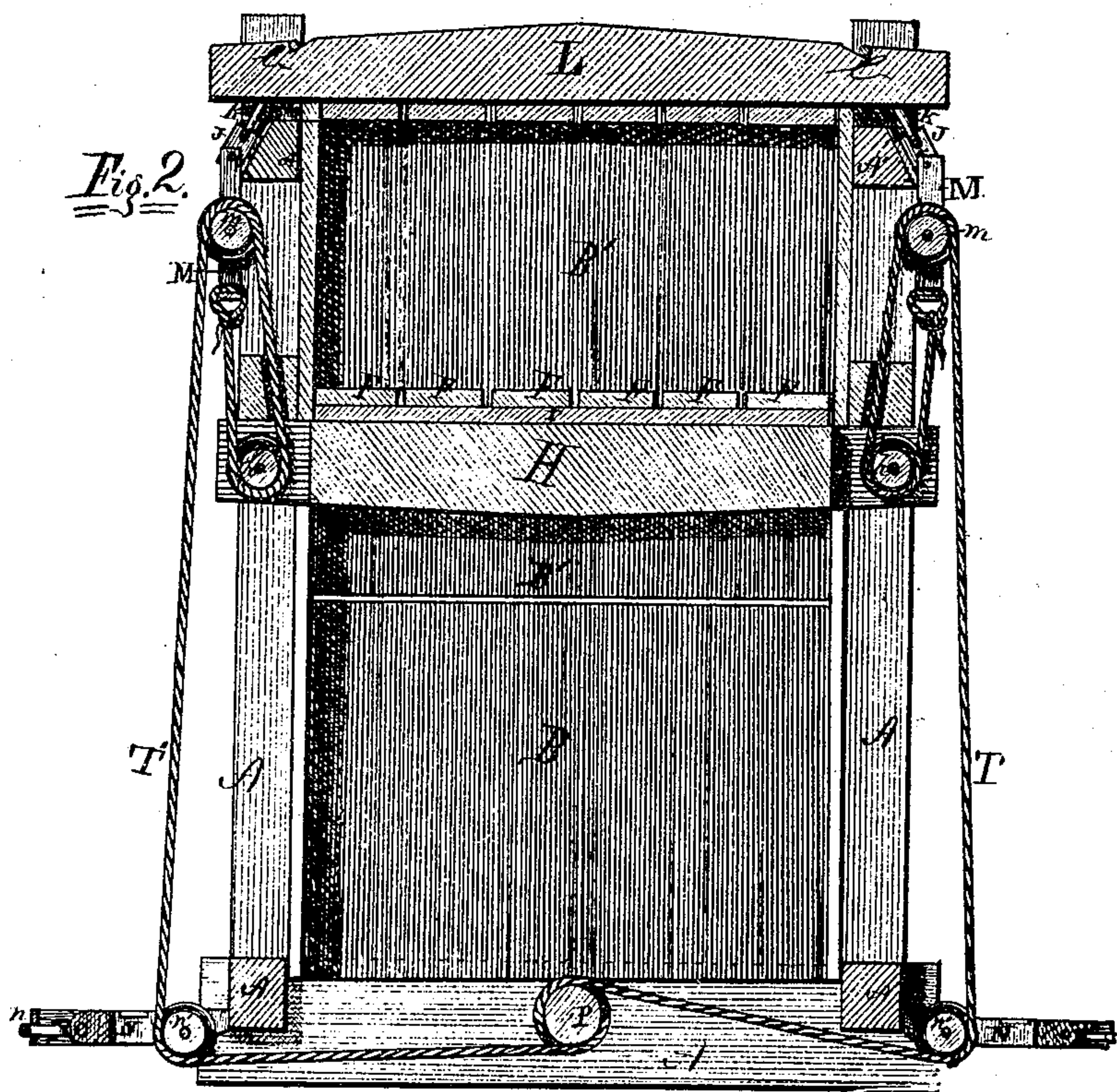
W.R. Newman,

2. Sheets, Sheet 2.

Baling Press.

No. 109653.

Patented Nov. 29, 1870.



Inventor;

Witnesses: *Chas. Norton.*  
*Platt R. Richards*

*Wm. R. Newman*  
*For W. B. Richards,*  
*his atty.*



# United States Patent Office.

WILLIAM R. NEWMAN, OF GALESBURG, ILLINOIS.

Letters Patent No. 109,653, dated November 29, 1870.

## IMPROVEMENT IN HAND-POWER BALING-PRESSES.

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

I, WILLIAM R. NEWMAN, of Galesburg, in the county of Knox and State of Illinois, have invented certain Improvements in Hand-Power Baling-Presses, of which the following is a specification.

### *Nature and Objects of the Invention.*

The nature of my invention relates to an improved hand-power press for baling cotton, hay, broom-corn, wool, rags, moss, hair, hops, hides, &c.; and

The invention consists—

First, in a simple arrangement of pulleys, windlass, and lever rock-bar, whereby the operation of pressing is facilitated by the operator being able to raise both ends of the bar supporting the follower, by means of the one lever, and the arrangement giving at the same time a great control of power;

Secondly, it consists in hanging the pulleys next the windlass in oscillating arms, to insure winding the cords smoothly and properly; and

Thirdly, it consists in enlarging the diameter of the windlass at the center, to further secure the proper winding of the operating cords thereon.

### *Description of the Accompanying Drawing.*

Figure 1 is a perspective view of a machine complete (except a portion of a door broken away) embodying my invention.

Figure 2 is a vertical sectional view on the plane of the line *x x*, fig. 1.

Figure 3 is a horizontal transverse section on the plane of the line *z z*, fig. 1, and showing that part of the machine below said line.

### *General Description.*

A is the frame-work of the apparatus, which differs in no essential particular from that in other hand-power presses.

B is the lining or siding, the upper part B' of which is hinged to form a door on each side of the machine, for convenience in tying, taking out the bundles or bales, &c.

The slats E forming the top of the machine or frame are held together by the frame-pieces D D, and slide in under the guides C C, in which manner the top may be removed when desired.

F is the follower, carried on a longitudinal beam H, the ends of which pass through vertical slots *e*, in the end pieces of the frame-work lining.

J J are plates, with their sides turned up, and are bolted to the frame-pieces A' A' at the top of the frame.

K K are links or loops, pivoted at their lower ends in the upturned sides of the plates J J, and their upper ends may be dropped into the notches *l*, in the top beam L, for the purpose of holding the top firm-

ly against the power when pressing; or they may be thrown back when it is desired to remove the top E E.

M M are loops, pivoted by a bolt at their upper ends in the sides of the plates J J, and carrying near their lower ends axial bolts, on which run the pulleys *m m*.

The ends of the beam H are slotted vertically, and carry the pulleys *h h* with suitable axles and bearings.

N N are formed arms, pivoted at their outer ends to the brackets *n n*, so they may have a free vibratory lateral movement at the forked end, where they carry the pulleys *n' n'* on axial bolts having bearings in the prongs of the bars or arms N N.

The brackets *n n* may be dispensed with, and the side bottom pieces of the frame extended, and a piece be framed across their ends, to which the arms N may be pivoted.

P is a windlass-shaft, having bearings in the longitudinal bottom frame-pieces, one end extending through far enough to carry the ratchet-wheel R and lever rock-bar S, with a nut and washer on the outer end.

S' is a pawl, pivoted to the rock-bar S, and

S'' is also a pawl, pivoted to the frame-piece A'.

It will be seen that when the rock-bar S is thrown up to a vertical position (being pivoted loosely on the end of the windlass) the pawl S'' will prevent the windlass from turning, and, while in a vertical position, the pawl S' will engage with the ratchet R, and the rock-bar being then brought down to the position shown at fig. 1, the windlass will, of course, be revolved, and the operation may be repeated as often as is necessary.

T T' are cords, one end of which is made fast to the lower end of the loops M, then passed downward around the pulleys *h*, and upward and over the pulleys *m*; again downward and around the pulleys *n'*, and from thence to the shaft P, the right-hand cord T passing around the shaft from above, and the cord T' passing around from underneath, both cords being made fast at their ends to said shaft.

It will be plainly seen that, by means of the cords T T' and the pulleys *n'*, *h*, and *m*, motion will be transmitted from the shaft P to the follower F, and, further, that said motion may be made slower, when desired, by a slower motion of the rock-bar S, and more rapid by a swifter movement of said bar, the lever S, the windlass P, and the series of pulleys *n'*, *h*, and *m* giving a control of power sufficient to do all desired pressing by hand-power, the whole being operated with one lever at one side of the machine, the power being transmitted to both ends of the bar H simultaneously and alike, thus carrying the follower F up level or horizontal. The cords T T' winding on the shaft P in opposite directions, and exactly opposite to

each other, tend to take off almost all of the strain on the frame-work, inseparable from most presses.

The dotted lines *N' N'* and *T' T'*, fig. 3, show the manner in which the oscillating arms *N N* guide the cord to the different parts of the shaft, the tapering shaft aiding itself by the rising incline to slide the cords back and wind them closely on the first half of its length, and tending, by the descending incline, to draw the cords forward and prevent their winding too closely on the last half of said shaft.

*Claims.*

I claim as my invention—

1. The combination and arrangement of the cords *T T'*, pulleys *n', h*, and *m*, windlass *P*, follower *F*, beam *H*, and loop *M*, with the frame *A*, substantially as described, and for the purpose set forth.

2. The vibrating arms *N N* and tapering shaft *P*, when arranged relatively as described, and operating conjointly to secure the proper winding of the cords *T T'* on the shaft *P*, substantially in the manner and for the purpose set forth.

WILLIAM R. NEWMAN.

Witnesses:

C. E. NORTON,  
J. B. HARSH.