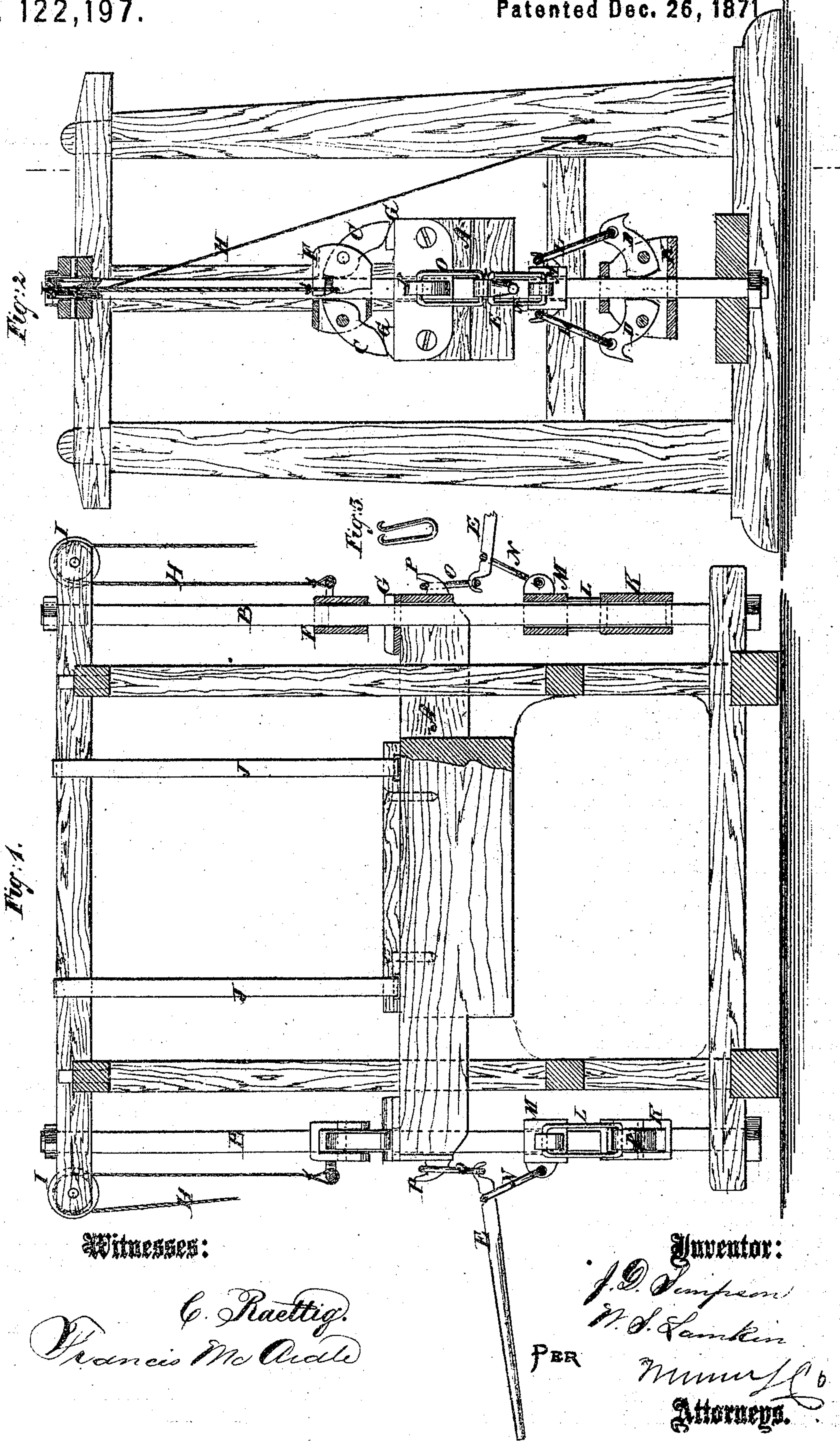


J. D. Simpson & W. S. Lamkin, Cotton Press.

No. 122,197.

Patented Dec. 26, 1871



UNITED STATES PATENT OFFICE.

THOMAS D. SIMPSON AND WILLIAM S. LAMKIN, OF MARSHALL, TEXAS.

IMPROVEMENT IN COTTON-PRESSES.

Specification forming part of Letters Patent No. 122,197, dated December 26, 1871.

To all whom it may concern:

Be it known that we, THOMAS D. SIMPSON and WILLIAM S. LAMKIN, of Marshall, in the county of Harrison and State of Texas, 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 others skilled in the art to make and use the same, reference being had to the accompanying drawings forming part of this specification.

This invention relates to improvements in friction-clamping apparatus used on vertical bars or rods of presses for holding the follower and lever in working the follower down in passing the bale. The invention consists in an improvement upon cotton-presses, which will first be clearly described and subsequently pointed out in the claim.

Figure 1 is a longitudinal sectional elevation of a press with our improved arrangement applied. Fig. 2 is a transverse sectional elevation, and Fig. 3 an elevation of a link which we use for connecting the lever with the follower when it is too high to work easily with the short links used.

Similar letters of reference indicate corresponding parts.

A is the follower, and B the vertical bar on which the gripping-cams work. C represents an upper pair of cams or dogs for holding the follower, and D a lower pair for holding the operating lever E. The cam-dogs C are pivoted near their upper ends in a block fitted on the bar so as to slide up and down readily, being placed on the opposite sides of the said bar, which are perpendicular to the long axis of the follower, and arranged so that the lower ends of the long arms rest on the upper side of the follower or on the curved block G thereon, which, together with the ends of said dogs, are so shaped that the upward pressure on them by the follower forces them in at the upper ends against the bar to gripe it and prevent the block from being forced up by the said pressure. The said block F has a cord, H, attached to it, said cord extending up over the pulley I and down again, to be conveniently reached by the attendant to draw said block and the dogs attached to it up when the pressing has been accomplished and the follower is to be raised for another operation. Previous to raising said block the cam-dogs are released from the

bar B by forcing the follower down slightly and holding the block by the cord, so as not to go with it, which allows the said cam-dogs to swing downward at the lower ends and away from the bar at the upper ends. The block, with the dogs, may then be raised as high as required by the cord to allow the follower to be raised for filling the press. The said follower may be raised by springs J or any other suitable means. The lower dogs are pivoted to a block, K, on the same sides the others are, so as to gripe the bar by having the long arms pulled upward; and these latter are connected, by links L, to another sliding block, M, on the bar, having a link, N, connected to its front side for holding the lever, as by a fulcrum, while the end is hooked into another link, O, suspended from a hook, P, projecting from the end of the follower. We have adopted this arrangement of the dogs for enabling us to employ two instead of one, as heretofore, which we find a much more reliable plan, and strains or cramps the bar much less.

The operation is similar to that of other machines of like character—that is, the upper block and dogs and the follower being raised as required for filling, the lower blocks K and M are raised sufficiently to apply the levers, which, being raised at the free end to force the follower down and then lowered, the blocks K and M will slide down by gravity for a new hold. But as it is inconvenient to work the levers at first when the follower is at or about the highest position, I propose to employ a long link, R, Fig. 3, with a hook in one end for connecting with the bottom of link O, and having the lever hooked into its lower end in the same manner that the said lever is represented as being connected with the said link O.

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

The curved blocks G on the follower, combined with dogs C pivoted in blocks F that slide on the bars B, when constructed and arranged as and for the purpose specified.

T. D. SIMPSON.
WM. S. LAMKIN.

Witnesses:

JAMES H. WITHERSPOON,
W. H. CRIGLER.

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