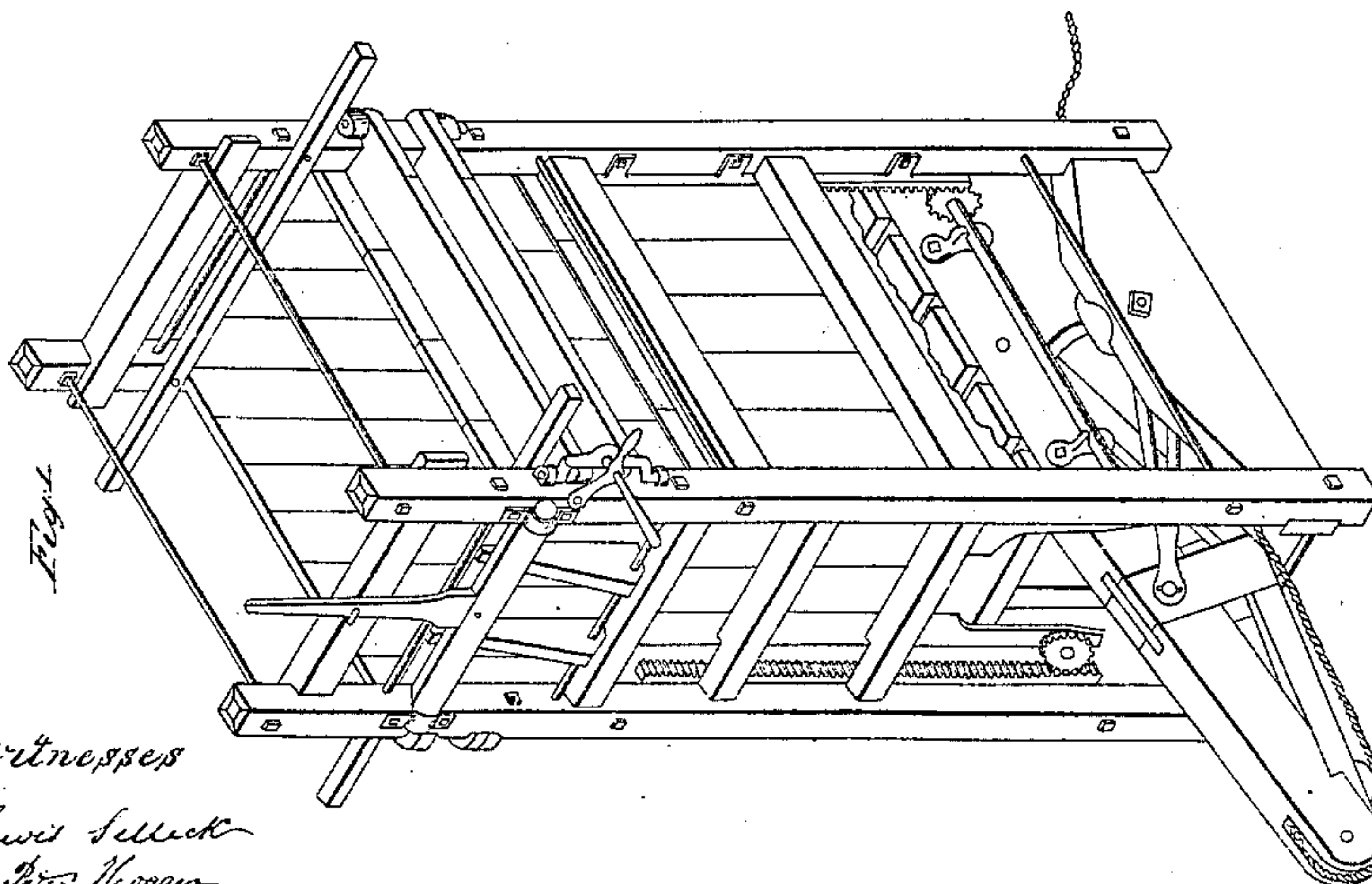
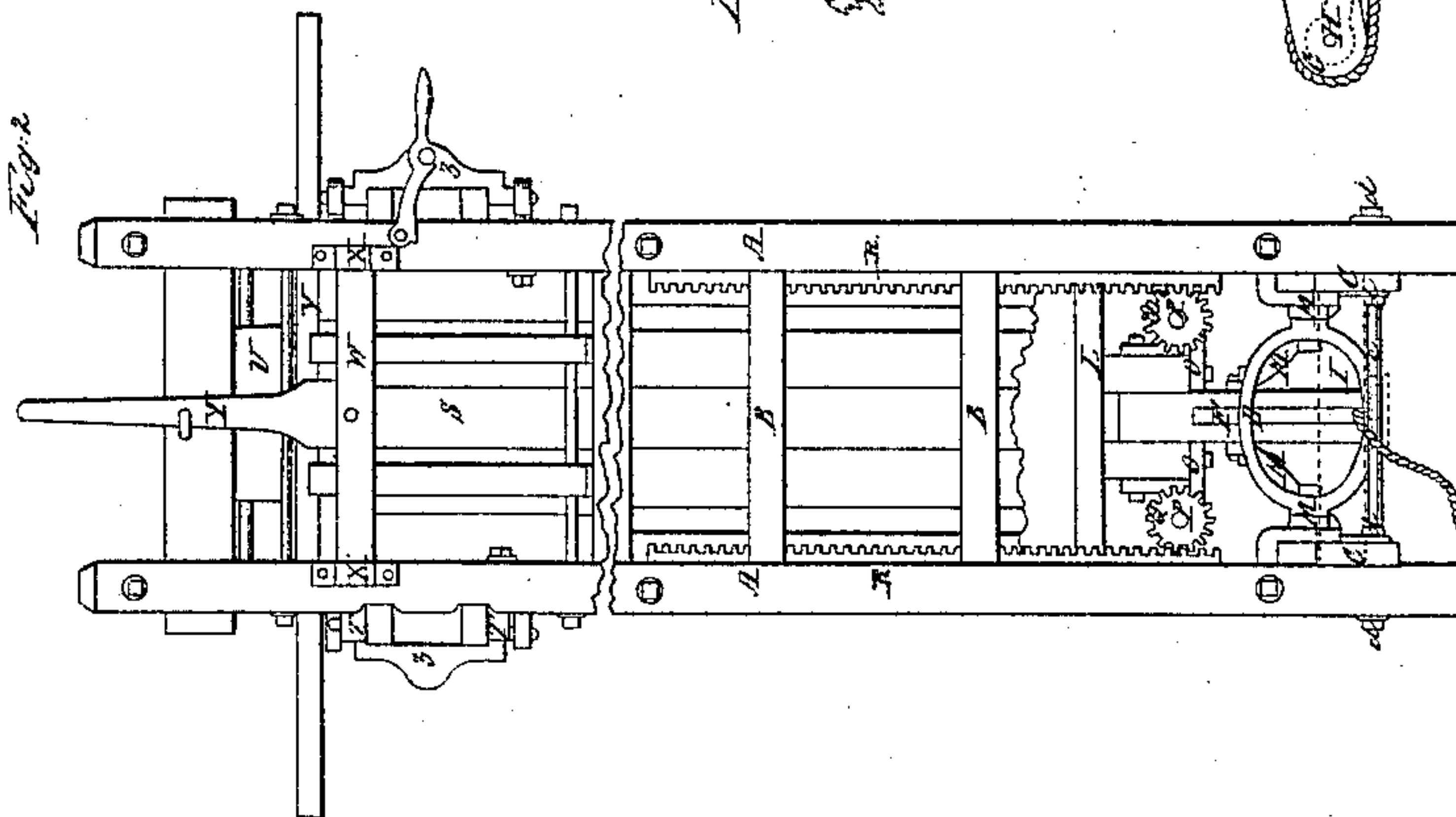
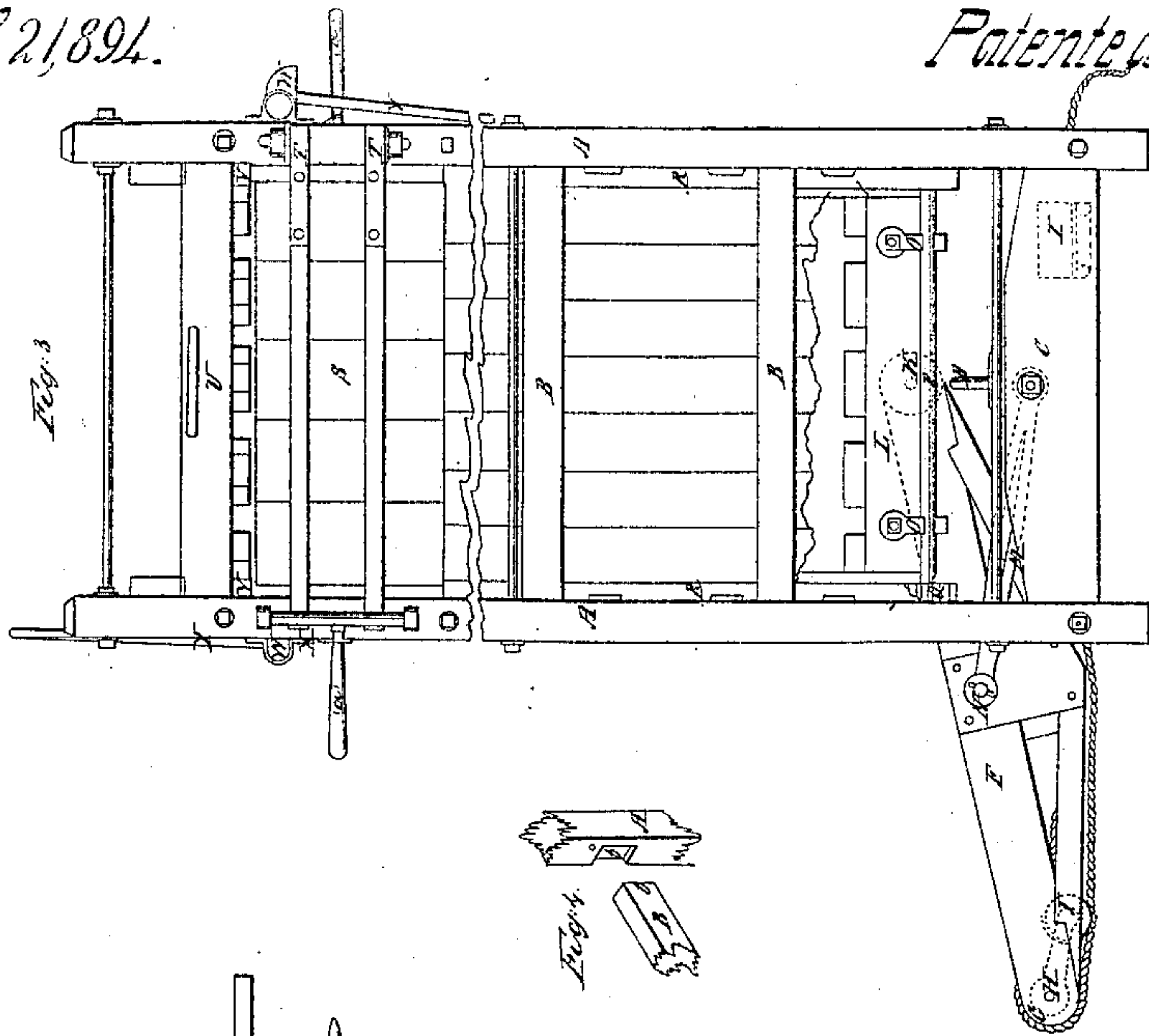


C. Martratt.

Cotton Press.

N^o 21,894.

Patented Oct. 26, 1858.



Witnesses
Lewis Sillcock
Peter Hogan

Inventor
Cornelius Martratt

UNITED STATES PATENT OFFICE.

C. MARTRATT, OF WATERFORD, NEW YORK.

IMPROVEMENT IN COTTON-PRESSES.

Specification forming part of Letters Patent No. 21,894, dated October 26, 1858.

To all whom it may concern:

Be it known that I, CORNELIUS MARTRATT, of the town of Waterford, county of Saratoga, State of New York, have invented a new and useful Improvement in Working of Cotton, Hay, and Cloth Presses.

The nature of my invention consists in distributing the motive power by racks and pinions, by means of which both ends are carried forward, and the follower is prevented from the tipping common in other machines, friction is diminished, and great strain is prevented, as hereinafter described.

Having thus stated the nature of my invention and for which I wish to secure Letters Patent, I will now proceed to describe it, and certify that the accompanying drawings are a full and correct representation of the machine.

Figure 1 represents an isometrical perspective view of the press in working order with the top or cover removed. Fig. 2 represents an end elevation of the press with a part of the box removed, showing the follower with racks and pinions, beam or lever, movable fulcrum, cross-bar, or open stay, and power-girts with check-rods. The upper part of the press is represented broken off under the doors, as the construction is of no importance in the claim. Fig. 3 represents a side elevation of the press with a part of the box removed, showing the working parts, as above described in Fig. 2, and with the upper part broken off, as before set forth.

A A A A, Figs. 2 and 3, represent the uprights forming the frame of the press.

B B B B are the side and end girts, gained or mortised horizontally into said uprights.

C C are the power-girts, which receive the strain of the press, and to which is bolted the cross-bar or open stay D, with steps *m*, to receive the movable fulcrums M M. Through the center of the cross-bar or open stay D the rope E passes, which gives motion to the beam or lever F, at one end of which a sheave, G, is fixed, which the rope E travels in, and which revolves freely on a pin, H, said rope being fastened to the cross-girts I. (Marked in red dotted lines on Figs. 2 and 3.) The other end of the beam or lever F is attached by means of the pin K to the follower L.

M M are the movable fulcrums, one end of which is attached to the step *m m*, and the other to the bolt N in the center of the beam or lever F.

O O O O are four brackets or journals bolted on the cross-beams of the follower L, in which the shafts P P revolve freely, and are situated one on each side. On each end of these two shafts a pinion is keyed, Q Q Q Q, which meshes into the racks R R R R, each one of said racks being bolted to the inside of the frame A A A A.

The power being applied by means of the rope E to the beam or lever F, said rope, passing over the sheave G, and being attached to the stay-girt I, and acting on the movable fulcrum M M, raises the follower L. The follower moves freely by means of the rope E, communicating with the beam or lever F, and the pressure is distributed over the whole surface of said follower L by means of the pinions Q Q Q Q meshing into the racks R R R R, said pinions being supported by the side shafts, P P, and the brackets or journals O O O O, by which means the follower is prevented from tipping, friction is diminished, and end and side strain is avoided.

S S are the doors, which form the box which receives the substance to be pressed, and are hung on hinges T T T T.

U is the top or cover, which slides in the bars V V.

W W are cross-beams, which act as cams and play freely in the journals X X, and are worked by levers Y Y, which serve to release the end doors enough to remove the pressed substance. The side doors are fastened by catches *z z*, on which levers *a a* are fixed.

I do not claim the lever or the follower with movable fulcrums to be new, as they have been used in other presses; nor do I claim the racks and pinions, as they are also used for various purposes; but

I do claim—

The application of the racks connected to the frame, in combination with the pinions and side shafts revolving freely and connected to the sides of said follower, for the purpose of distributing the pressure equally over the surface of follower as it is raised, and obviating the tipping and end strain and diminishing the friction, substantially as herein set forth.

CORNELIUS MARTRATT.

Witnesses:

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