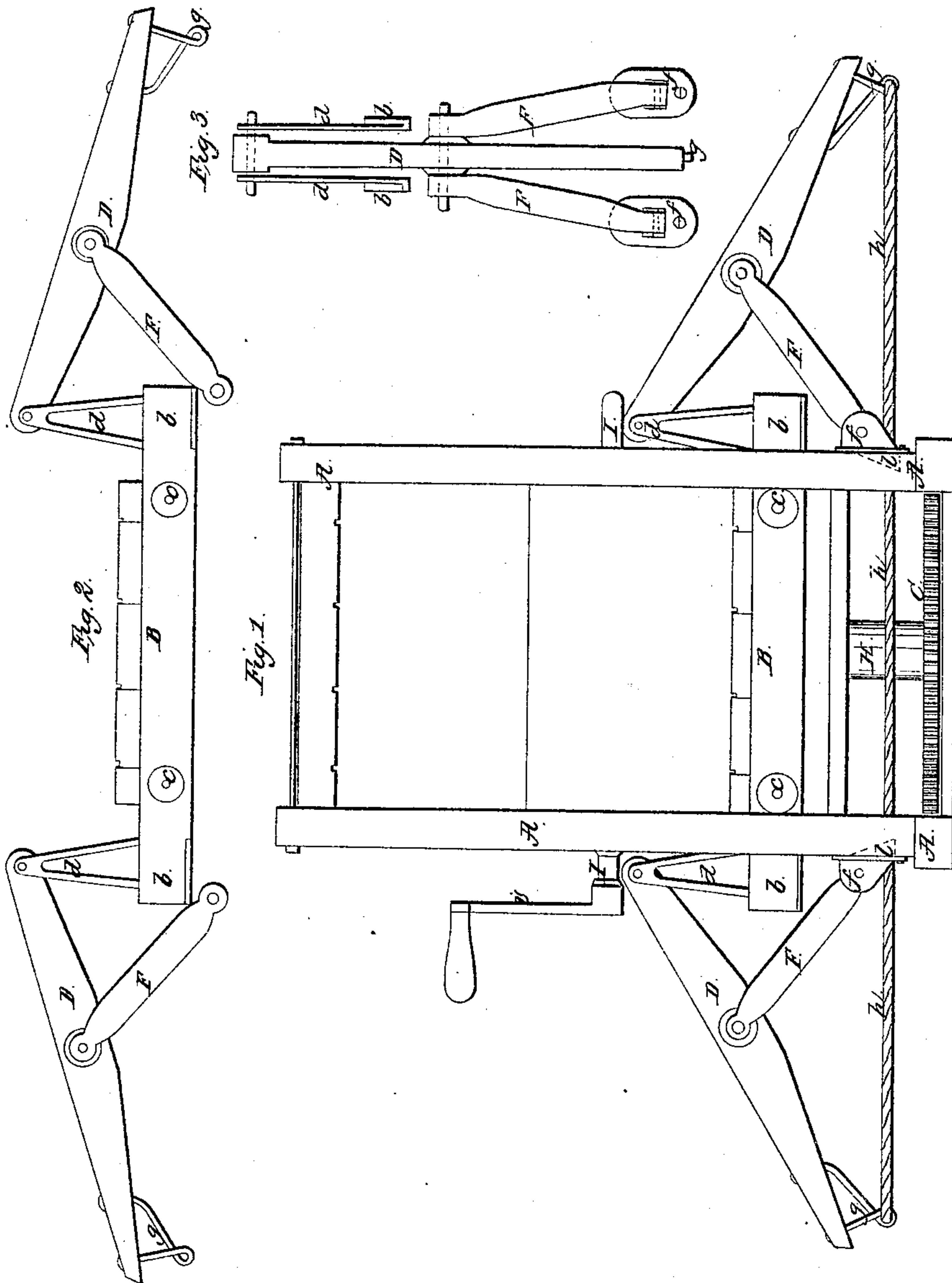


# L. Dederick, Hay Press.

N<sup>o</sup> 39258.

Patented July 14, 1863.



Witnesses:  
E. Evans Jr.  
A. Moore

Inventor:  
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# UNITED STATES PATENT OFFICE.

LEVI DEDERICK, OF ALBANY, NEW YORK.

## IMPROVEMENT IN HAY-PRESSES.

Specification forming part of Letters Patent No. 39,258, dated July 14, 1863.

*To all whom it may concern:*

Be it known that I, LEVI DEDERICK, of Albany, in the county of Albany and State of New York, have invented an Improved Press for Pressing Cloth, Cotton, Hay, &c.; and I do hereby declare that the following is a full and exact description thereof, reference being had to the accompanying drawings, making part of this specification—

Figure 1 being a front elevation of my improved press; Fig. 2, a front view of the follower and operating-levers detached; Fig. 3, an end elevation of the same detached.

Like letters designate corresponding parts in all of the figures.

The press to which my improvement is applied belongs to that class in which toggle-levers operated by ropes and windlass are employed for applying the pressure, and in which the follower acts vertically; and the object of the improvement is to render the press compact, so that it may be placed in any room of ordinary height and all the parts be arranged for convenience in use.

The main frame or case A is of ordinary and convenient construction, there being attached thereto a smaller rear frame, in which the driving-shaft I (ordinarily turned by a winch, *i*,) is mounted, as well as a vertical shaft, which transmits, through suitable gearing, the motion of the driving-shaft to a vertical windlass, H, in the bottom of the main frame.

Previous to my invention, whenever toggle-levers were employed they either were located inside of the frame, thereby requiring the whole to be much higher than convenient, or they reached above the press and were connected with the follower below by long lifting-rods, or their equivalents, extending down to the follower inside of the press. This arrangement required a great height of room, and the connection between the power applied and the toggle-levers was not close, compact, nor convenient. I completely obviate all of these difficulties by extending the supporting-bars of the follower B out through slots or vertical openings in the sides of the press A, and locating the toggle-levers D D at the sides of the press, so as to lift the projecting ends *b b* of

the follower, and yet be situated so near the base of the press as not to require any additional height for their operation, but to bring the connections of the working parts closer, and consequently lighter and more compact.

There are two projecting beam ends, *b b*, at each side of the press, at a sufficient distance apart to allow the toggle-levers to pass between them, as seen in Fig. 3. The upper ends of the toggle-levers are pivoted to suspension braces or stirrups *d d*, which are firmly secured to these ends of the follower-beams, and lift the same thereby. At a proper position in the toggle-levers, near the middle thereof, fulcrum-bars F F are jointed thereto at their ends, while their lower ends are pivoted to fulcrum-blocks *f f*, which are strong, and firmly secured to the sides of the press near the bottom, there being projecting lugs *l l*, (seen in dotted lines, Fig. 1,) or their equivalents, which enter notches in the sides of the press, substantially as shown, to certainly insure a firm connection. The toggle-levers also pass freely between these fulcrum blocks and bars, as shown in Fig. 3, so that they may be brought into a vertical position, close to the press, when operating. The lower ends of the toggle-levers have suitable eyes, staples, or hooks, *g g*, attached to them, for connecting therewith ropes or chains *h h*. These ropes or chains extend to and wind around the windlass H, which, when turned, draws the toggle-levers into a vertical position and lifts the follower.

What I claim as my invention, and desire to secure by Letters Patent, is—

The arrangement and combination of the follower with its beams projecting through the sides of the press, and the toggle-levers located and operating at the sides of the press, substantially as and for the purposes herein specified.

In witness whereof I have hereunto signed my name in the presence of two subscribing witnesses.

LEVI DEDERICK.

Witnesses:

H. S. MCBALL,

WM. L. VAN DERLIP.