

W. D. Mendenhall.
Press for Shaping Mould-boards for Plows.
Nº 93,107. Patented Jul. 27, 1869.

Fig. 1.

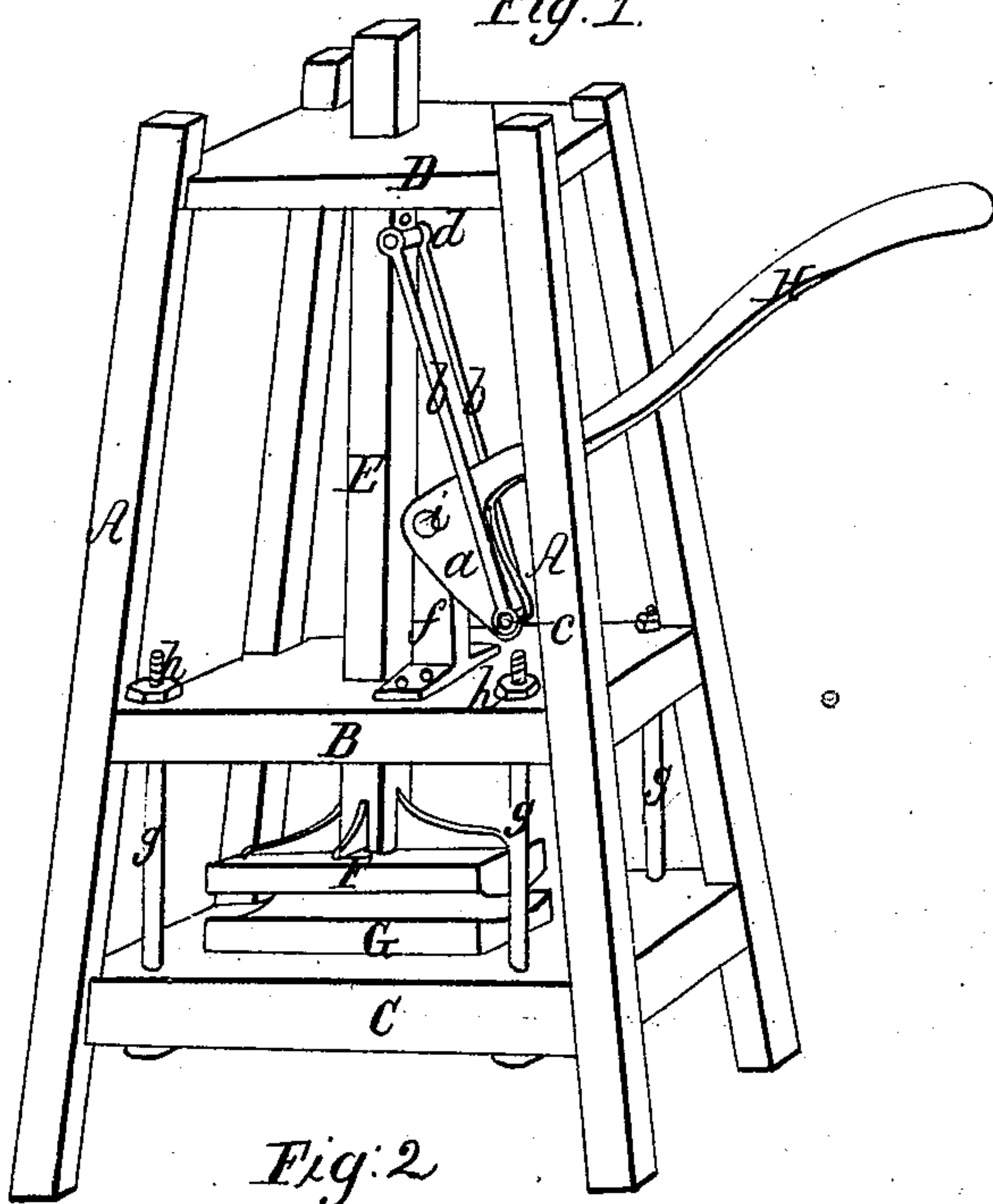


Fig. 2.

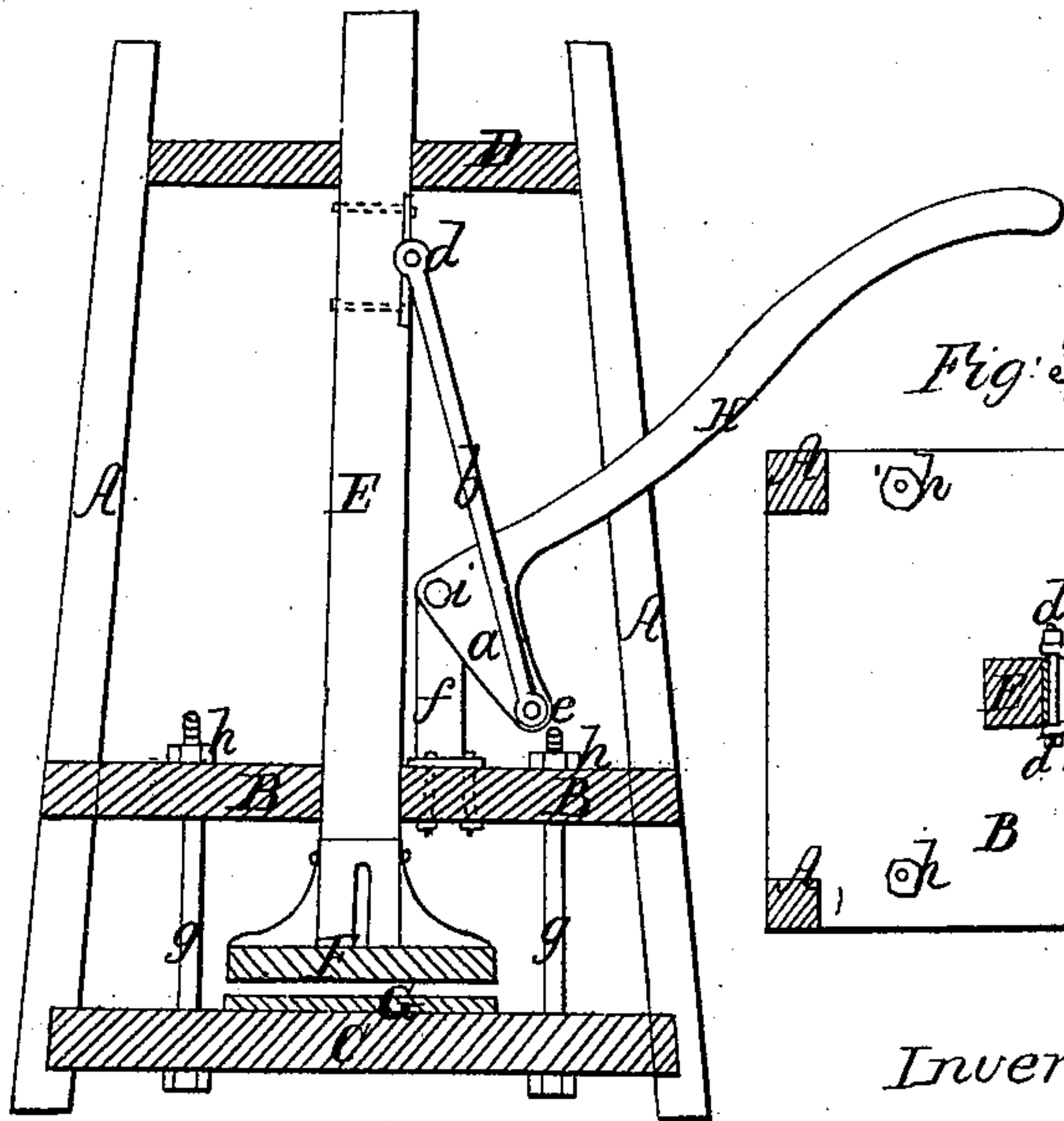


Fig. 3.

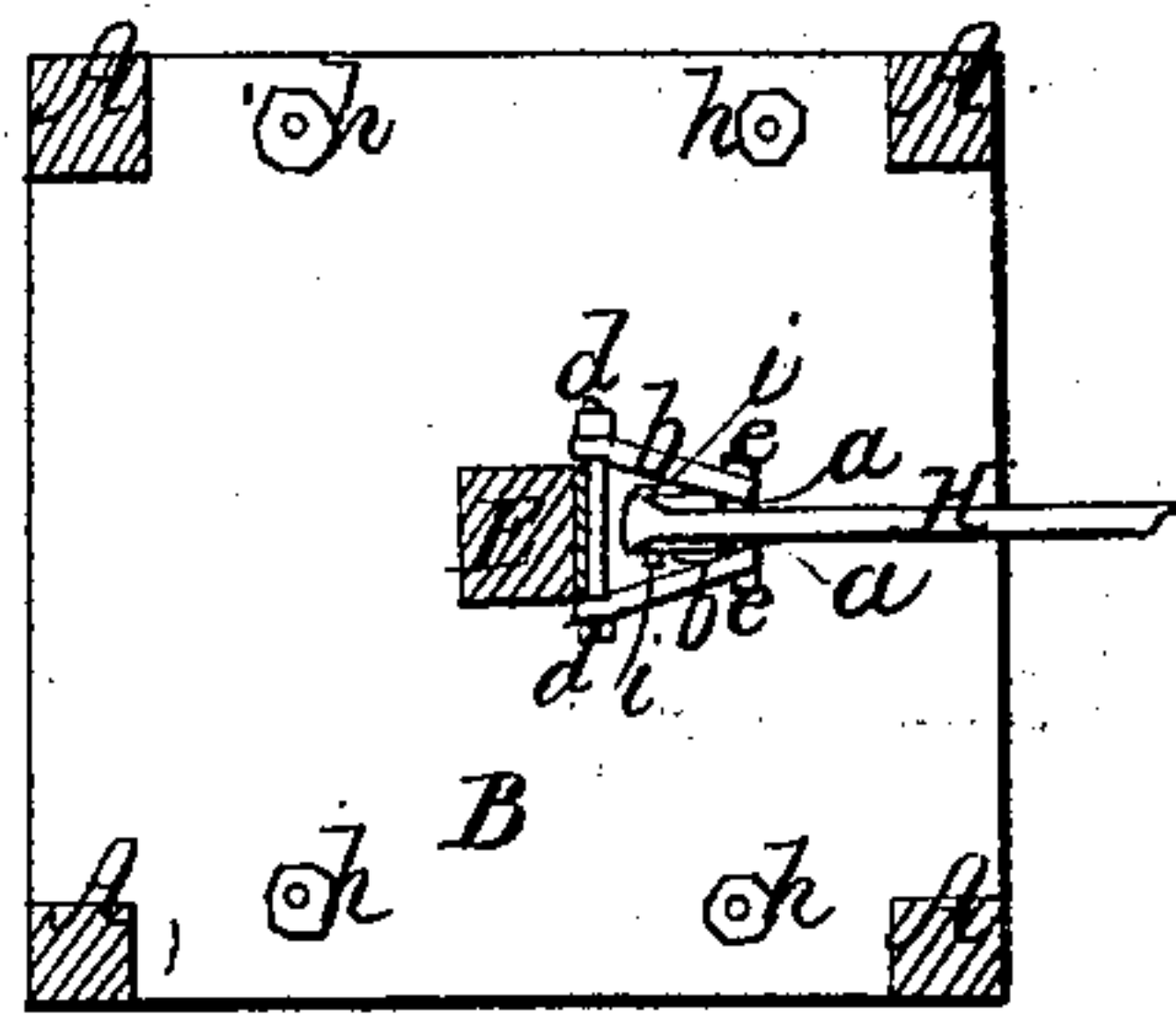
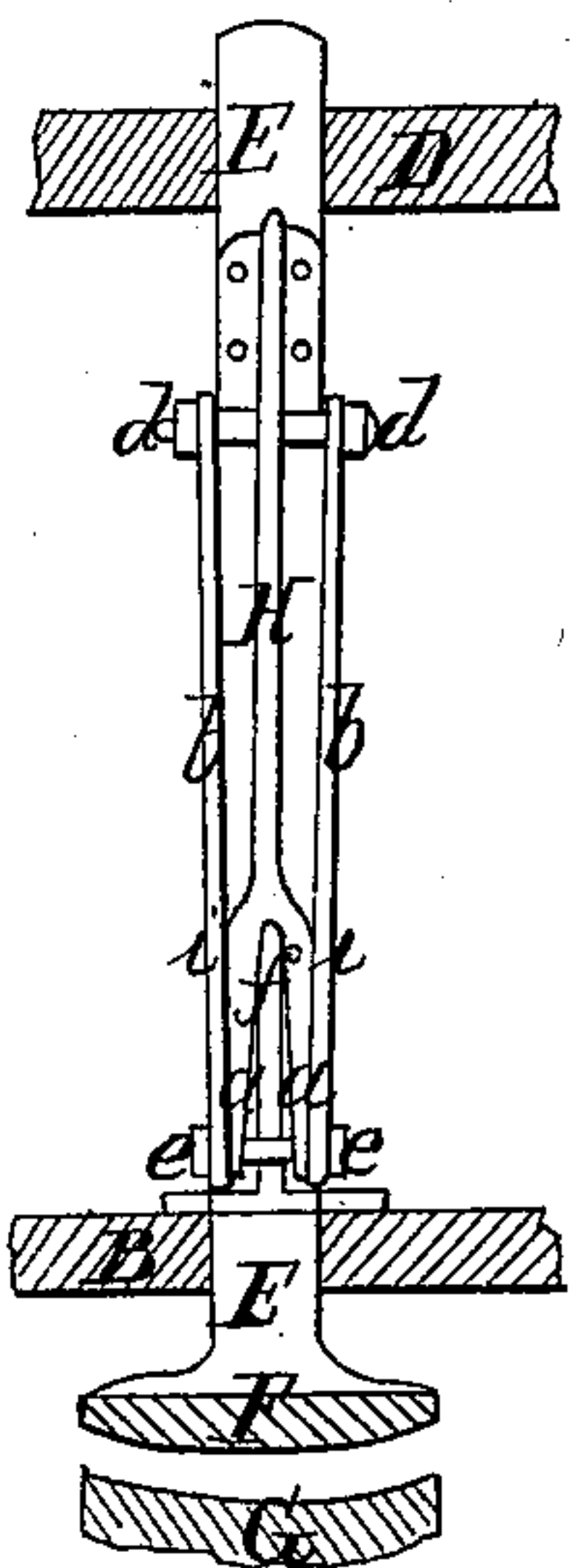


Fig. 4.



Witnesses;
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W. D. MENDENHALL, OF FARMINGTON, ILLINOIS.

Letters Patent No. 93,107, dated July 27, 1869.

IMPROVED PRESS FOR OPERATING, BENDING, AND SHAPING DIES.

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

To all whom it may concern :

Be it known that I, W. D. MENDENHALL, of Farmington, in the county of Fulton, and in the State of Illinois, have invented a new and improved Press for Moulding or Shaping Mould-Boards for Plows, and for similar purposes; and do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the annexed drawings, making a part of this specification, in which like letters of reference refer to like parts, and in which—

Figure 1 represents a perspective view.

Figure 2, an elevation of the same.

Figure 3, plan of the same.

Figure 4, elevation of working-part of same, showing the lever and rods, &c.

This invention consists of a square frame, A A, with an adjustable platform, C, which carries the lower half of the mould-block G, in which the mould-board of a plow is pressed or shaped.

The upper half of the mould-block F is attached to the lower end of a vertical bar, E, which moves in guides D B, which latter act also as braces to keep the frame intact.

This bar is actuated by a bent lever, *a*, the short arm of which is united to parallel rods *b b*, the latter being connected by their upper ends, at *d*, with said bar E, the lever being fulcrumed on a standard, *f*, on the stationary platform B.

Having now given the outlines of this device, I will proceed with a more comprehensive description of the parts.

The platform B is mortised, or otherwise secured to the four standards A A A A of the frame.

Beneath this is a second platform, C, suspended to the former by means of bolts *g g*, &c., with nuts *h h*, by which the distance between the platforms, or rather the mould-blocks, is adjusted, to obtain the proper "throw" of the lever *a*.

The upper platform B supports a standard, *f*, or fulcrum, for the angle *i* of the bent lever *a*.

The handle of the latter, H, projects at a right angle from the said lever, at this point, *i. e.*, the fulcrum.

The end of the short arm of the lever is connected with the upper part of the vertical bar E, by one or more bars, connected at each end with bolts, or equivalent fastenings, to the bar E above, and the lever *a* below.

The connection of this rod or rods with the vertical bar may be by means of a plate of iron, carrying a strong staple for the bolt.

The short arm *a* of the lever may be so constructed as to allow the standard *f*, on which it is fulcrumed, to pass upwards through a slot or division of this part of the lever, as seen in fig. 4.

The operation of this machine is as follows :

The raising of the handle H, of the lever *a*, throws up the bar E, carrying the upper mould-block F, by the action of the rods *b b*, on the former.

The depression of the handle brings the point of the lever *a*, to which are attached the lower ends of the parallel rods *b b*, downwards, or nearer to the mould-blocks, pressing down with it, by means of said rods, the vertical bar E, which carries the upper mould-block F.

The bolts *g g g g* are so adjusted as to give the lever *a* the full amount of its leverage in its pressure on the iron plate or mould-board, placed between the mould-blocks, to be shaped.

The full power exerted by the lever will be, of course, near the point at which the upper and lower ends of the rods *b b* are in a line with the fulcrum of the lever *a*.

The lower platform C may be notched at each corner, to admit an angle of the post, or any similar device for securing it an easy guide in proper position, when in the act of being raised or lowered.

Having thus fully described my invention,

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

1. The combination, in a press for shaping the mould-boards or plates of plows, and for bending similar metal plates, &c., the lever *a*, with its handle H, rod or rods *b b*, with their bolts and connections, the vertical bar or shaft E, with its shoe or head, at its lower end, the fulcrum or support *f*, of the lever *a*, and the guides or platforms B and D, all substantially as described and for the purposes set forth.

2. In combination with the above, and working with them, the adjustable platform C, with its bolts *g g g g*, or equivalent means for adjustment of this platform to the upper one, to suit mould-boards of any thickness to the full power of the lever, substantially as described and for the purposes set forth.

In testimony that I claim the foregoing, I have hereunto set my hand, this 4th day of June, A. D. 1869.

W. D. MENDENHALL.

Witnesses:

BERNARD BAILY,
JOHN CLARENDON.