

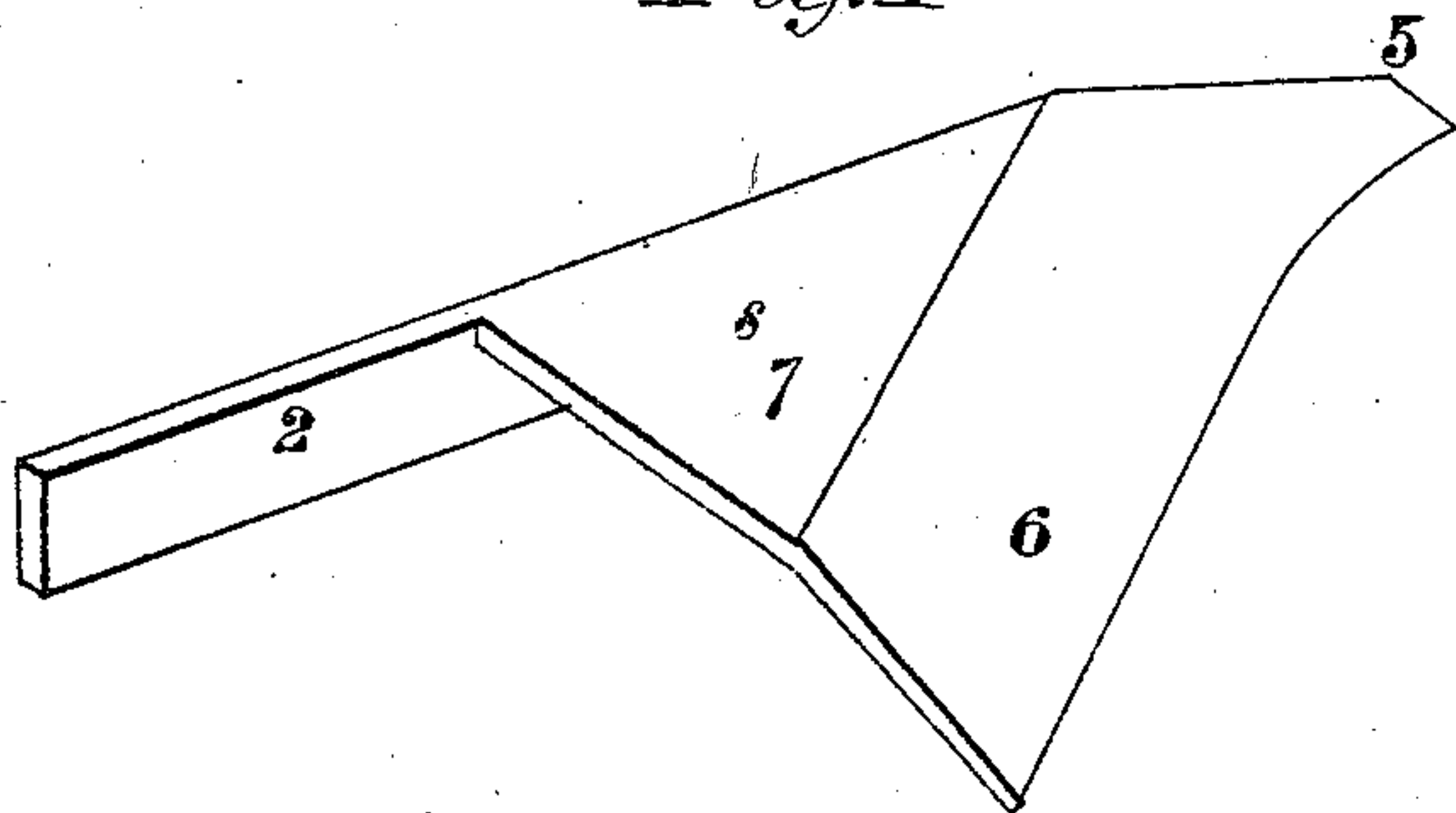
D. H. ROWE.

Improvement in Blanks of which to Construct, Integrally,  
the Landsides and Shares of Plows.

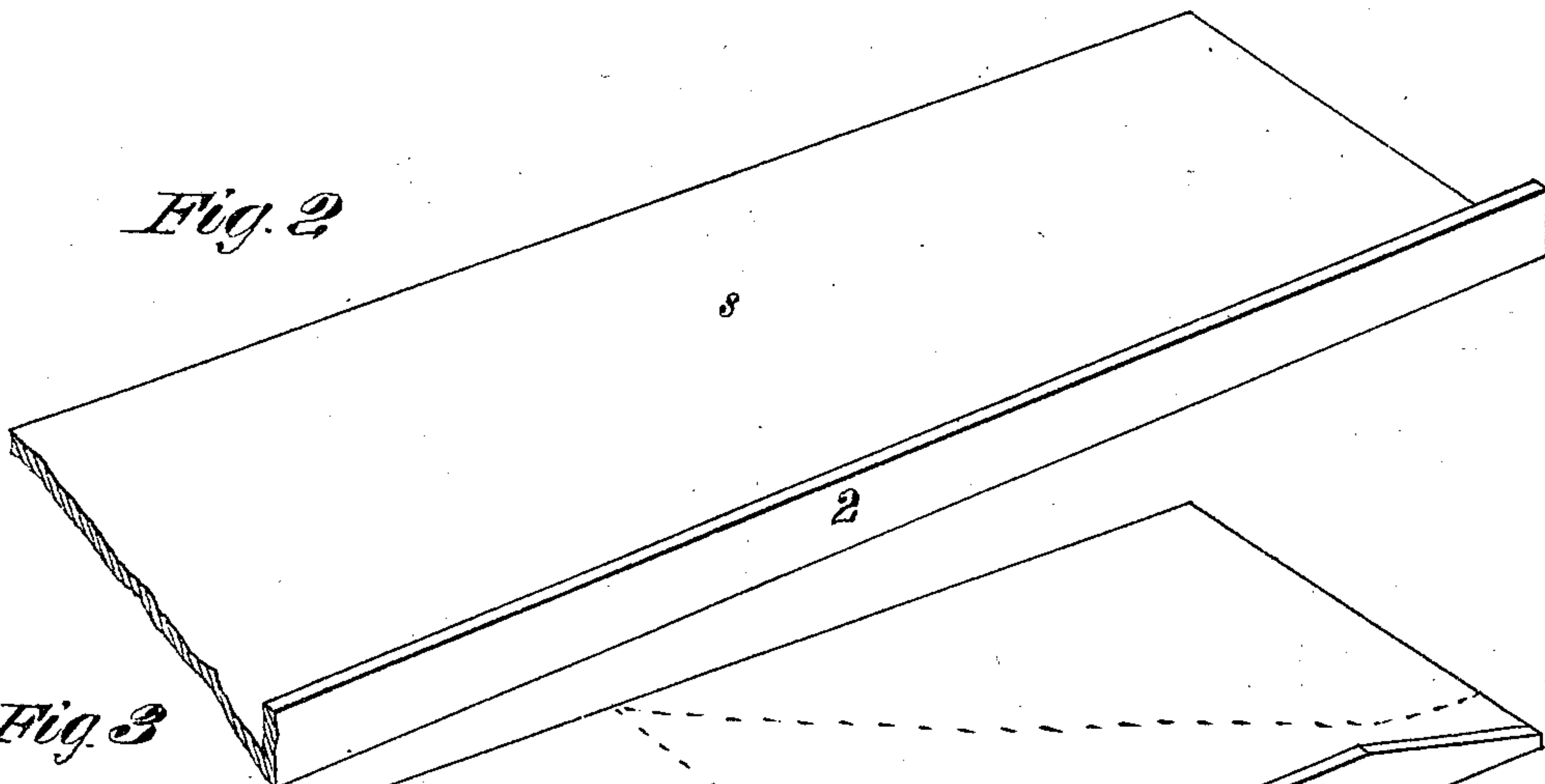
No. 125,909.

Patented April 23, 1872.

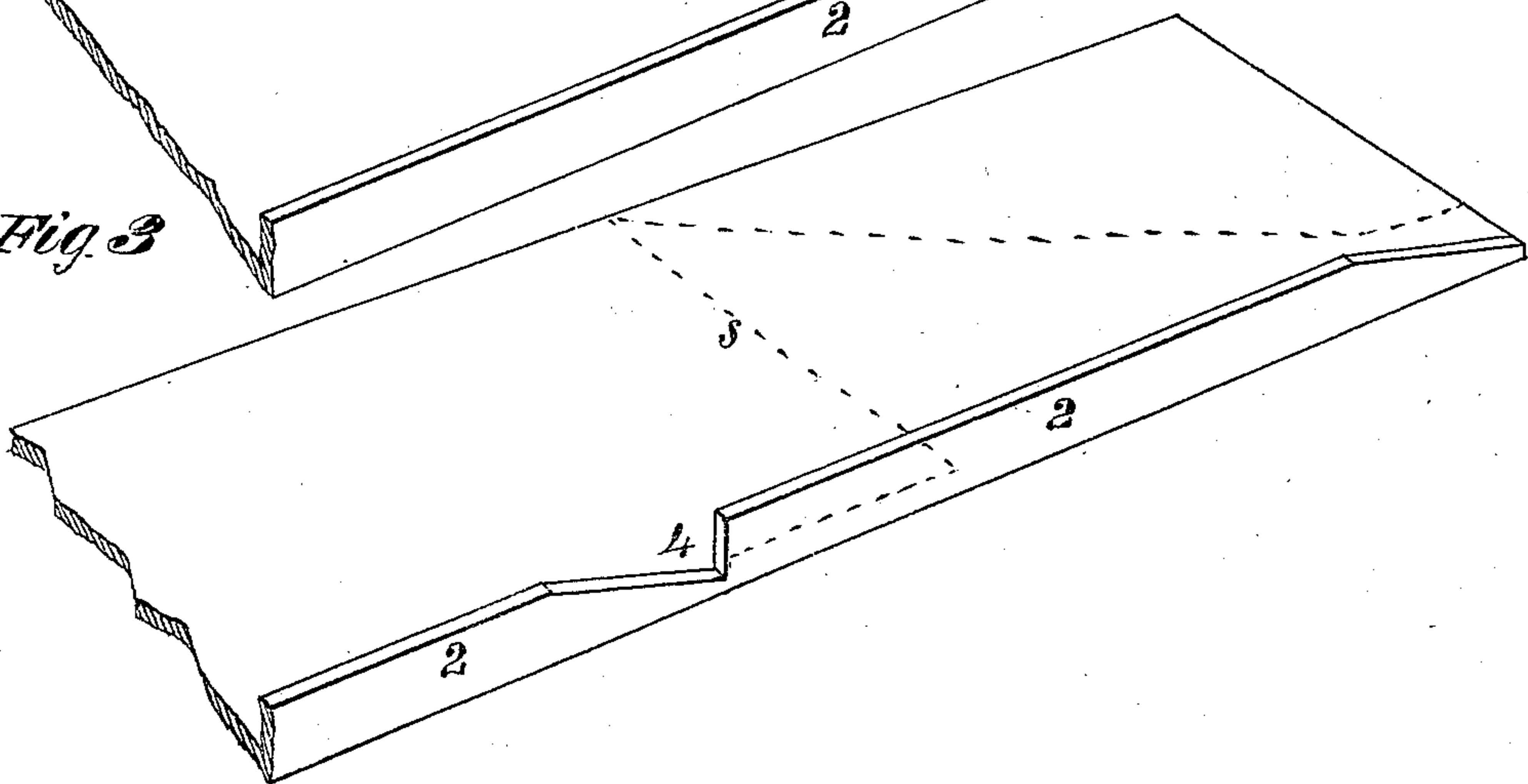
*Fig. 1*



*Fig. 2*



*Fig. 3*



*Witnesses.*

*R. Campbell.*  
*J. N. Campbell.*

*Inventor*

*Daniel H. Rowe*

*by*  
*Wm. R. R. & Co.*

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Fig. 4

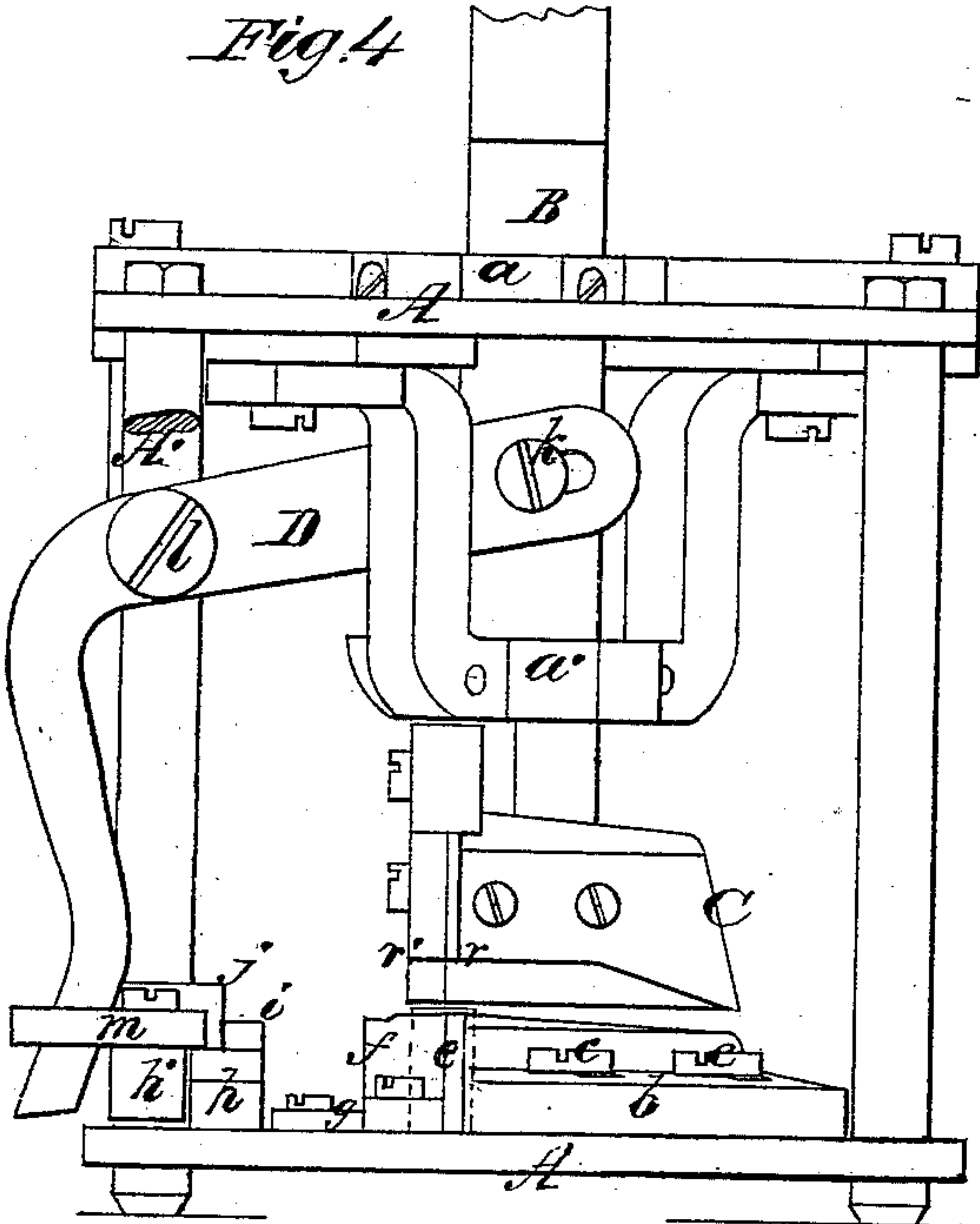


Fig. 6

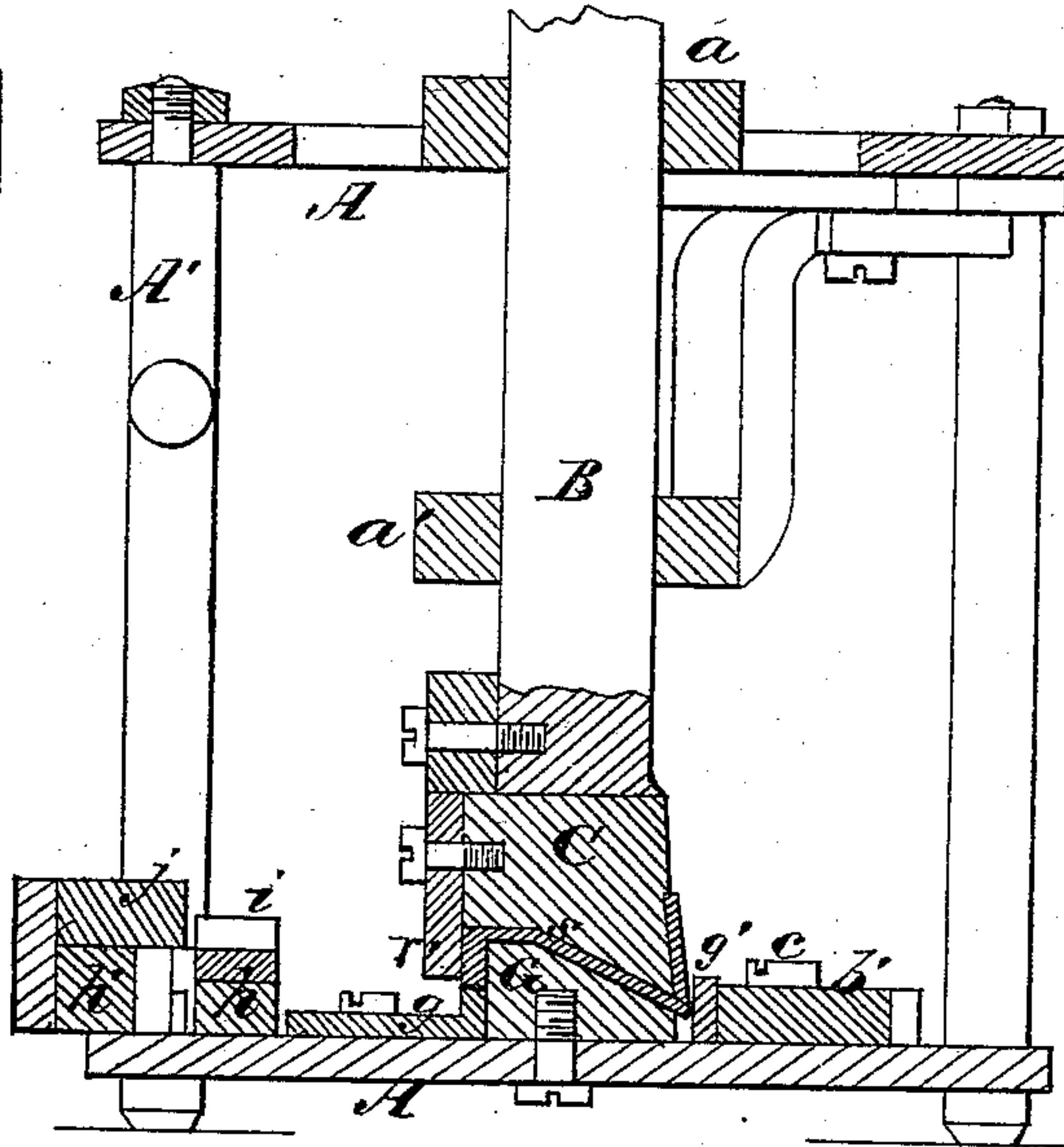


Fig. 5

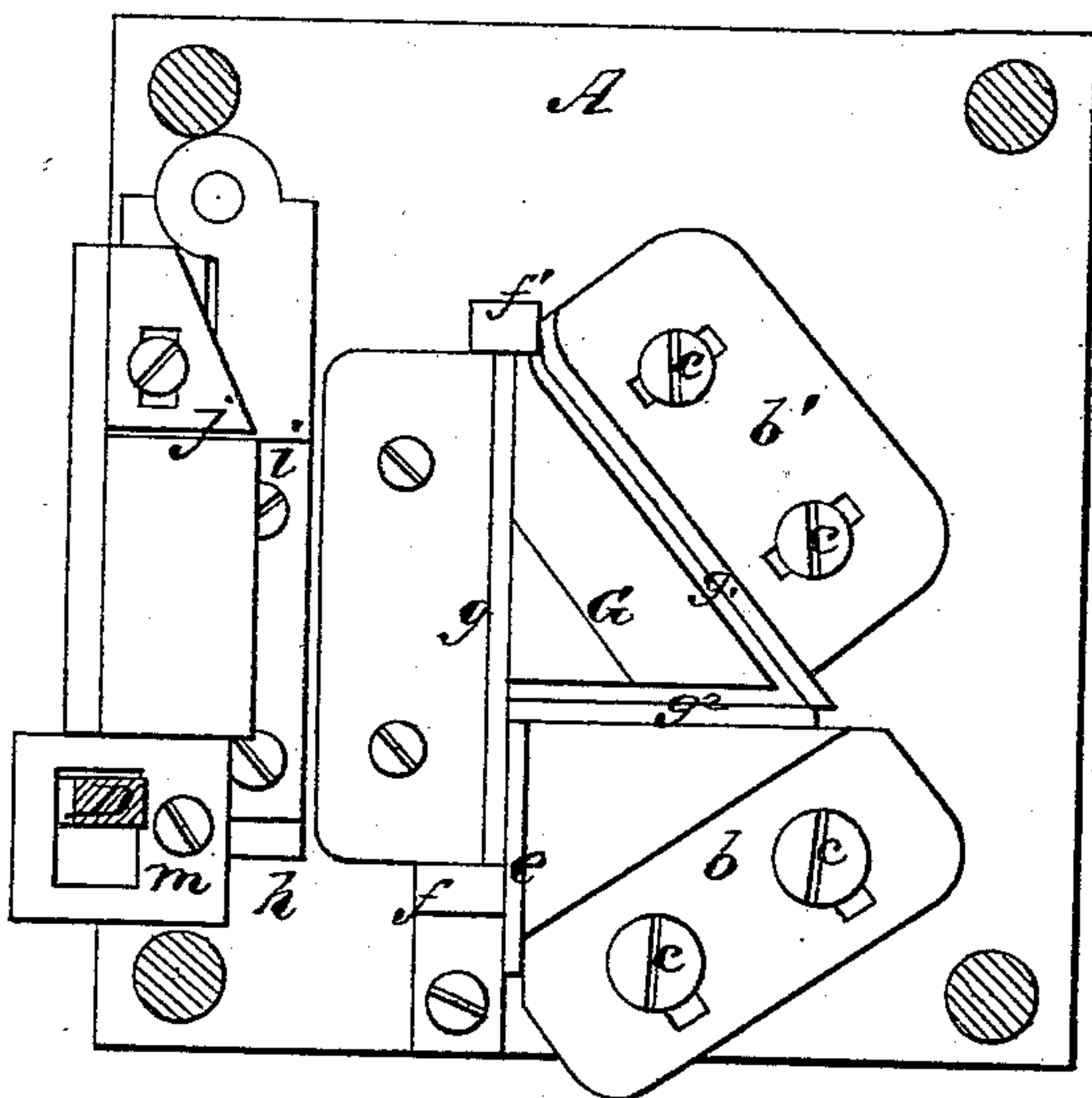
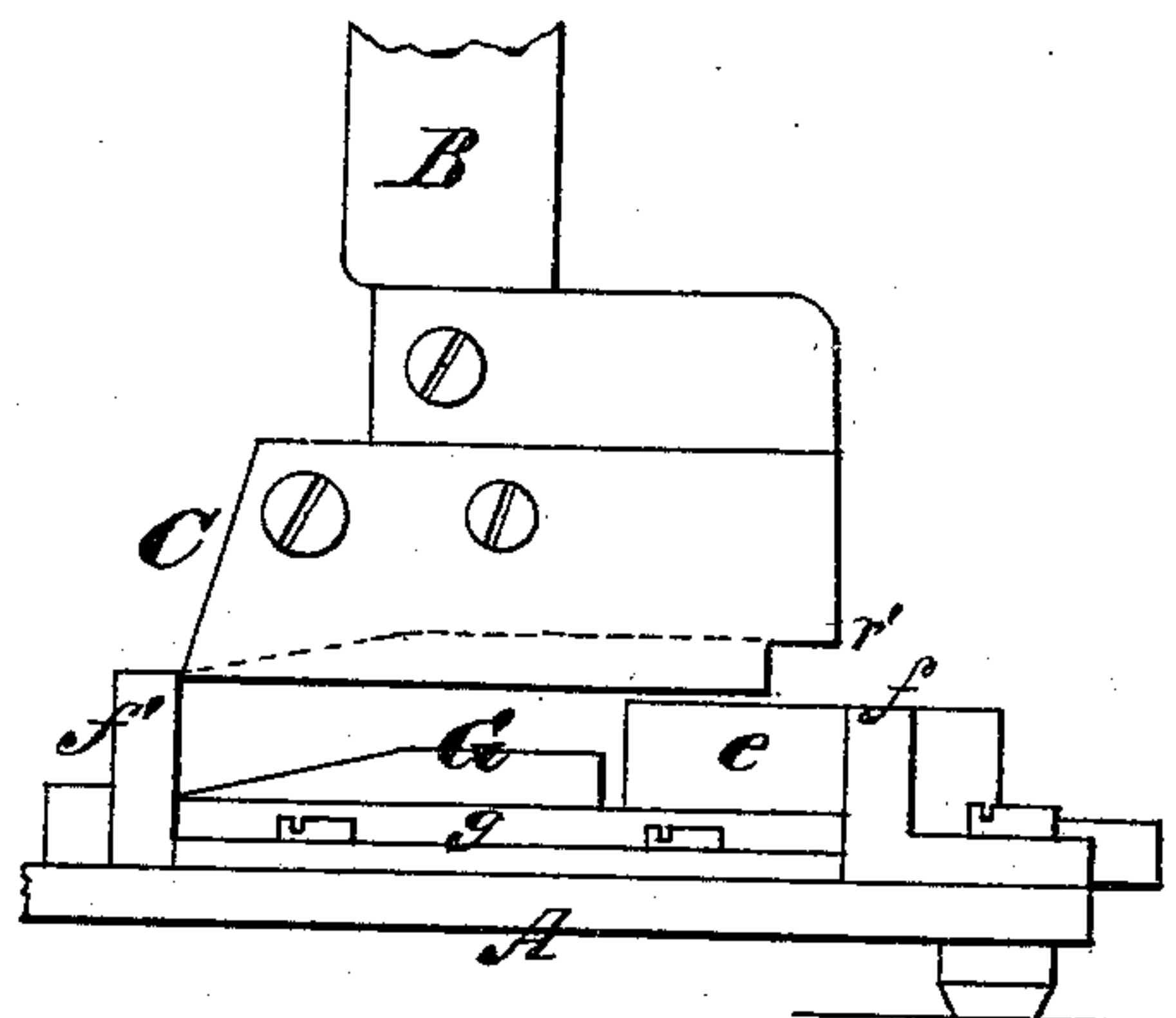


Fig. 7



Witnesses,  
R. H. Campbell,  
J. M. Campbell.

Inventor  
D. H. Rowe  
by  
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# UNITED STATES PATENT OFFICE.

DANIEL H. ROWE, OF MARTINSVILLE, ILLINOIS.

IMPROVEMENT IN BLANKS OF WHICH TO CONSTRUCT INTEGRALLY THE LAND-SIDES AND SHARES OF PLOWS.

Specification forming part of Letters Patent No. 125,909, dated April 23, 1872.

## B

*To all whom it may concern:*

Be it known that I, DANIEL H. ROWE, of Martinsville, in the county of Clark and State of Illinois, have invented a new and Improved Blank for a Combined Plowshare and Land-Side; and I do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawing making part of this specification, in which—

Figure 1, Plate 1, is a perspective view of the plowshare and land-side, which I contemplate producing from my improved blank. Fig. 2 shows a rolled blank. Fig. 3 shows the same after it has been notched. Fig. 4, Plate 2, is a front view of a machine which I contemplate using for notching the rolled blanks and swaging the same. Fig. 5 is a top view of the bed of the machine as seen by making a horizontal section through the posts of the same. Fig. 6 is a section taken vertically and transversely through the machine. Fig. 7 is a view in detail of the two dies of said machine as seen from one side.

Similar letters of reference indicate corresponding parts in the several figures.

The object of this invention is to produce a blank for a plowshare, land-side, sole, and point complete of one piece of metal, as will be hereinafter explained.

The following description of my invention will enable others skilled in the art to produce my improved blank.

I take a strip of sheet metal, *s*, of proper width and thickness, and of any desired length, and pass it between rollers which are so constructed that they will turn one edge (the thickest edge) at right angles to the body of the strip, as indicated at 2, Fig. 2. This strip is then applied to shears which I will hereinafter explain, and notches 4 made into the flange 2 at proper distances apart. Each notch presents a beveled edge, terminating in a perpendicular edge, as shown in Fig. 3. The beveled edge is swaged into a point, 5, for one plow, and the perpendicular edge forms the heel of the land-side 2 of another plow, while that portion of the metal of the whole width of the strip which is inclined between two notches is cut out, as indicated in Fig. 3 in dotted lines, and pressed into the form shown

in Fig. 1. The article thus produced from one piece of metal consists of a thick land-side, 2, a point, 5, a share, 6, and a sole, 7; and I will now describe a practical mode of making it.

In the annexed drawing, Plate 2, A represents the frame of a machine for making my blank and an article therefrom, which consists of two horizontal plates united by strong upright posts. In the center of this frame A is a vertically-movable shaft, B, which is guided by means of bearings *a a'*, and held so that it will neither turn to the right or left. The upper end of this shaft B is adapted for the ready attachment to it of a lever or other device for forcibly moving it up and down. The lower end of this shaft has rigidly secured to it a die-head, C, of triangular form, and with a concave bottom corresponding precisely to the shape of the upper surfaces of the share, sole, and point of the article produced. Those edges of the die C which correspond to the back and oblique edges of the article are cutting-edges, and perform their cutting against two shear-blades, *g<sup>1</sup> g<sup>2</sup>*, which are secured to two adjustable blocks, *b b'*, on the bed-plate of the frame A, as shown in Fig. 5. These blocks *b b'* are secured upon the bed-plate by means of screws *c c*, which pass through slots and allow the blocks to be adjusted toward or from each other. Directly beneath the die C is a forming-die, G, the shape of which corresponds to the bottom surface of the sole, share, and point of the article produced. This die G is screwed fast upon the bed-plate, with its perpendicular land-side in the same plane with a shear-blade, *e*, which is secured to the angular block *b* at right angles to the shear-cutter *g<sup>2</sup>*, as shown in Fig. 5. This shear-blade *e* operates with a shearing-edge, *r*, which is secured to an extension of the die C, and leaves on the finished article the rear land-side extension. The raised lip of an adjustable plate, *g*, is set up in close contact with the shear-blade *e* and the land-side of the die G, and affords a support for the land-side portion of the blanks while they are being operated on. At one extremity of this rest *g* is a perpendicular elevation, *f*, which serves in connection with a cutting-edge, *r'*, at the rear of the cutter *r*, for cutting off the land-side portions of the blanks. The shears which notch the flanges 2 of the



blanks consist of two bars,  $h$   $h'$ , which are hinged together at  $n$ . The bar  $h$  is secured fast upon the bed-plate of the frame A at a suitable distance from the dies, and the bar  $h'$  is free to swing about its hinge, and is moved by means of the shaft B acting through the medium of a bent lever, D. This lever D is pivoted at  $k$  to the shaft B, at  $l$  to a bracket, A', and its lower end plays through an eye piece,  $m$ , which is secured to the free end of the bar  $h'$ . When the shaft B is depressed the bar  $h'$  will be separated from bar  $h$ , and when the shaft B is raised the notching can be performed. The cutting is performed by the edge of an angular elevation,  $i$ , on bar  $h$ , and a shear-blade,  $j$ , on the bar  $h'$ . If desirable the shears may be mounted in a frame of its own and worked in any convenient manner independently of the die-shaft B. The plate  $s$ , prepared as above-described, is heated and intro-

duced between the dies which, at one blow of the upper die C, produces the article shown in Fig. 1.

Under this application for Letters Patent I do not claim the machinery for notching the blanks and pressing them into shape, as I have filed another application bearing even date with the filing of this and marked case A, wherein the machinery herein explained is claimed.

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

The blank represented by Fig. 3, consisting of a plate turned up on one edge and notched, as described, out of which to produce the land-side 2, point 5, sole 7, and share 6, substantially as set forth.

DANIEL H. ROWE.

Witnesses:

SAMUEL M. SNARELY,  
GEORGE WM. KENPER.