

*G. H. Dennison,
Bench Plane.*

No. 41,367.

Patented Jan. 26, 1864.

Fig. 2.

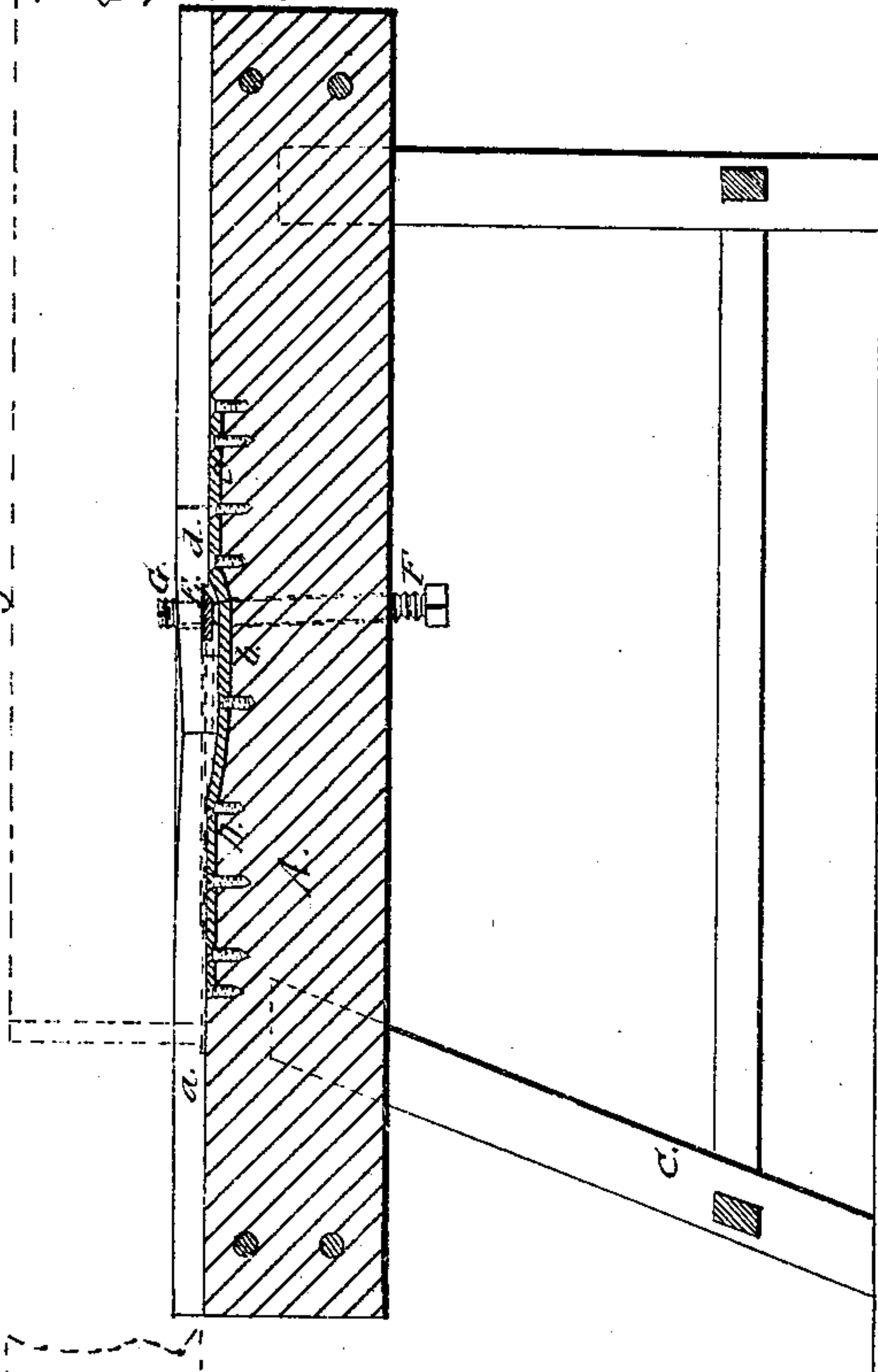
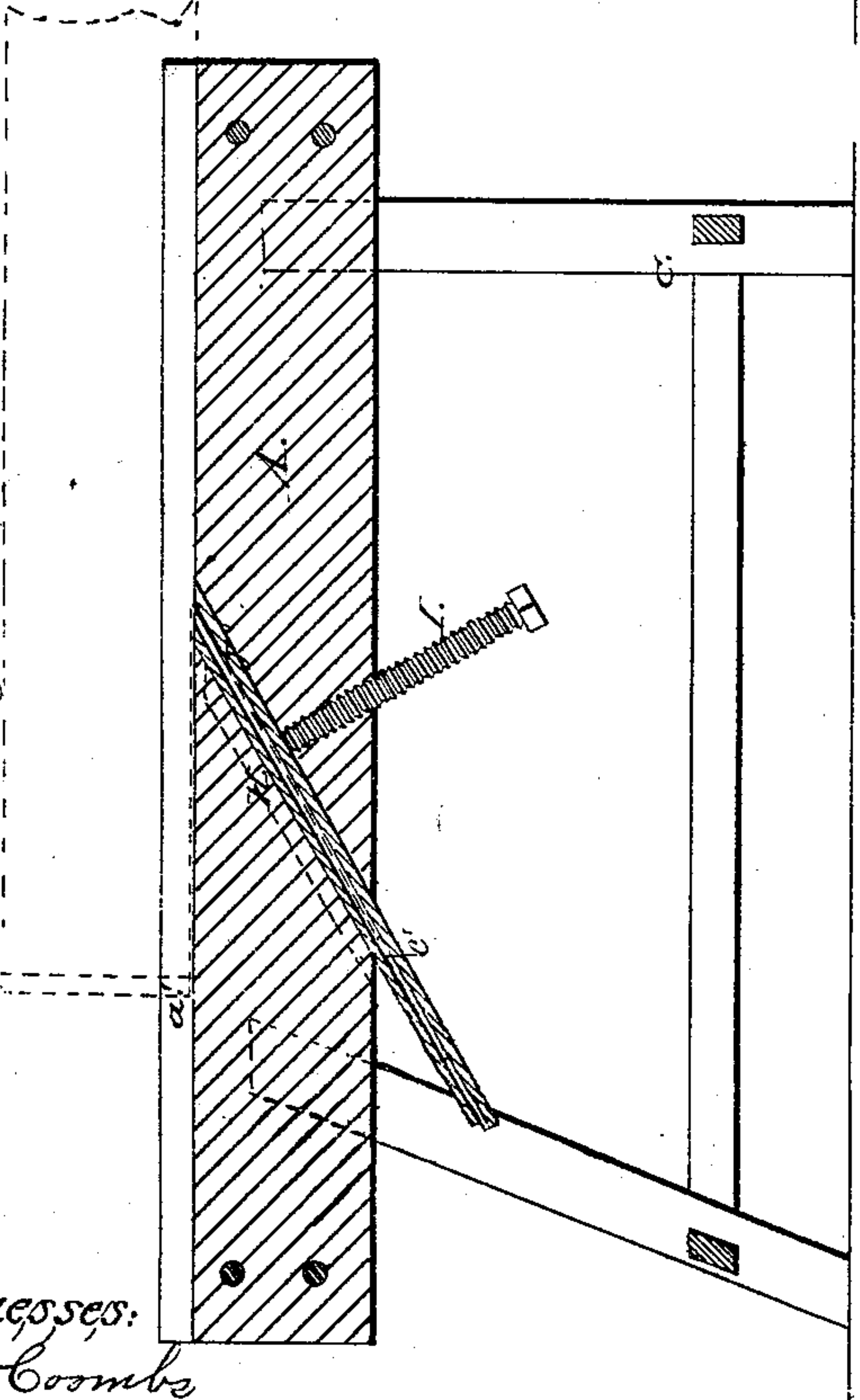


Fig. 4.



*Witnesses:
J. W. Coombs
G. W. Red*

Fig. 1.

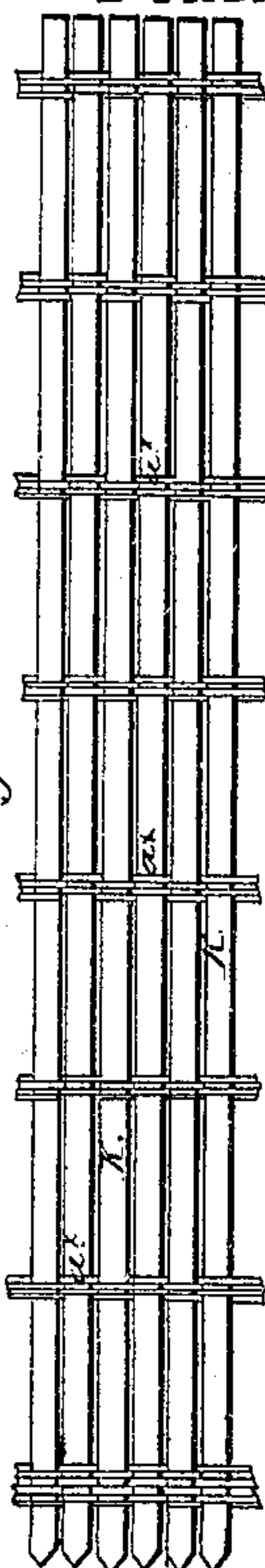
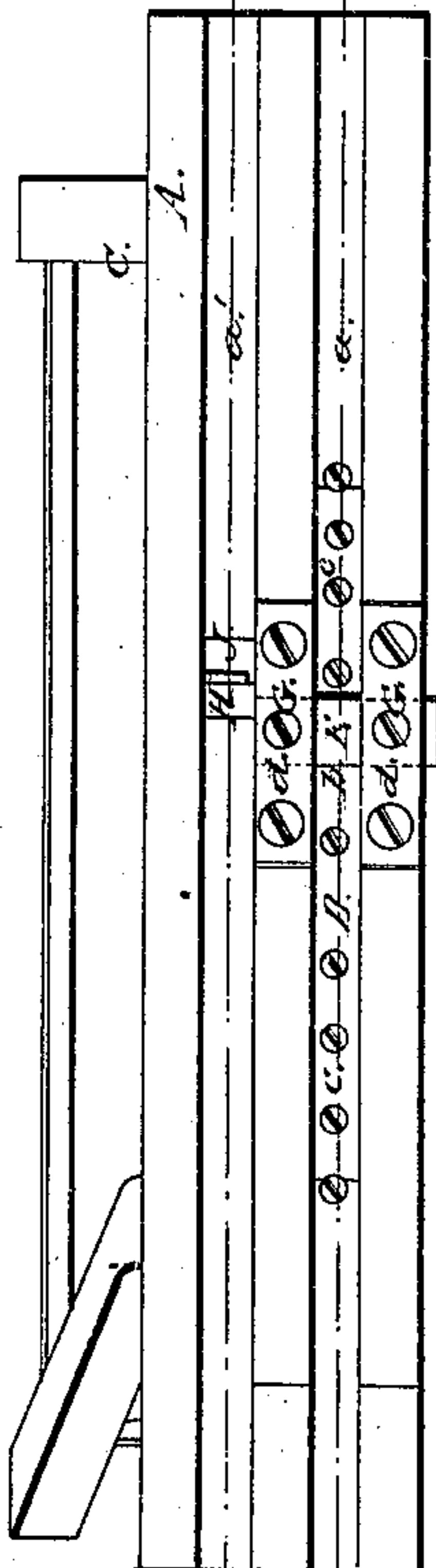


Fig. 3.



Fig. 5.



*Inventor: G. H. Dennison
per Wm. H. Gully*

UNITED STATES PATENT OFFICE.

G. H. DENISON, OF SUSPENSION BRIDGE, NEW YORK.

IMPROVED MACHINE FOR CUTTING SLATS FOR WINDOW-BLINDS.

Specification forming part of Letters Patent No. 41,367, dated January 26, 1864.

To all whom it may concern:

Be it known that I, G. H. DENISON, of Suspension Bridge, in the county of Niagara and State of New York, have invented a new and useful Machine for Cutting Slats for Window-Blinds; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawings, making a part of this specification, in which—

Figure 1 is a side sectional view of my invention taken in the line *x x*, Fig. 3; Fig. 2, a side sectional view of the same taken in the line *y y*, Fig. 3; Fig. 3, a plan or top view of the same; Figs. 4 and 5, face views of portions of window-blinds, the slats of which are cut by my invention.

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

This invention relates to a new and useful machine for cutting the thin slats which are used for making inside rolling blinds for windows; and it consists in the employment or use of adjustable cutters and a stationary concave and a gage-iron or cap-plate, all arranged in such a manner as to admit of the slats being cut from the bolt by simply shoving the latter along over the cutters, the device being capable of cutting the slats both from straight and cross grained wood.

To enable those skilled in the art to fully understand and construct my invention, I will proceed to describe it.

A represents a horizontal bed-piece, which has two longitudinal grooves or recesses, *a a'*, made in it extending its whole length. This bed-piece is supported at a suitable height by a proper framing, C. In the bottom of the groove *a* there is fitted a metal bed, D, a portion, *b*, of which is of concave form, the other part being horizontal, and at each end of the concave part *b*, as shown at *c c* in Fig. 2, this bed D is "let in" the bottom of the groove *a*.

E represents a knife or cutter, which is placed transversely over the bed D, and rests on two screws, F F, which pass vertically through the bed-piece A, one at each side of the groove *a*, and said knife or cutter is firmly secured in position by set-screws G G, which pass down through metal bars *d d*, fitted in the upper part of the bed-piece, and bear upon the cutter directly over the screws

G G. The cutter E is at the front part of the concave portion *b* of the metal bed D, and is adjusted at a height above the concave to suit the desired thickness of the slats to be cut.

From the above description it will be seen that the concave portion *b* of the bed D forms a throat for the cutter E, and by pushing or shoving a bolt (shown in red) along upon the bed-piece A in the groove *a* the cutter E will cut a slat from the bottom of the bolt, the slat passing underneath the cutter, between it and the concave, (see Fig. 2,) in which a slat is shown partially cut from the bolt. By this arrangement the concave portion *b* of the bed D admits of a free cutting action of the cutter E and a free passage of the slat while being cut, while the slat is held up parallel with the under surface of the bolt and the cutter not rendered so liable to follow the grain of the wood as it otherwise would be, and bolts not having a perfectly-straight grain may be cut with greater facility. The bolt, of course, is gotten out of the proper thickness and length to suit the desired width and length of the slats to be cut. The thickness of the slats may be graduated as desired by setting the cutter E higher or lower.

H is an inclined cutter, which is fitted in the bed-piece A so as to extend up through the bottom of the groove *a'*. This cutter H is secured in position by a set screw, I, as shown in Fig. 1, and it has a cap-plate, J, secured to its under surface, said cap-plate having a groove, *c'*, made longitudinally in it to admit of the passage of the slats through it as they are cut. The upper end of the cap-plate J is beveled to correspond to the bevel of the cutting-edge of the cutter H, and the cutter may be adjusted higher or lower, according to the desired thickness of the slats to be cut. This arrangement of the cutter H and cap-plate J is well adapted for cutting bolts having a straight grain.

The device is extremely simple and efficient, may be constructed at a moderate cost, and operated with the greatest facility. A window-blind is shown in Figs. 4 and 5, K representing the slats and *a^x* the cords by which they are connected together.

Having thus described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. The concave bed D, in combination with

the adjustable cutter E, arranged in connection with the bed-piece A, substantially as and for the purpose herein set forth.

2. The cutter H, provided with the grooved cap-plate J, and fitted in the bed-piece A, substantially as and for the purpose specified.

3. Providing the bed-piece A with two longitudinal grooves, *a a'*, in combination with

the two cutters E H, provided, respectively, with the concave bed D and cap-plate J, substantially as and for the purpose specified.

GEORGE H. DENISON.

Witnesses:

E. B. GRISWOLD,
O. D. CAMP.