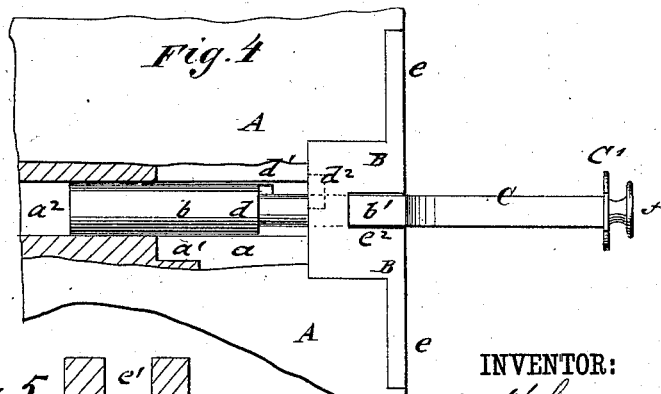
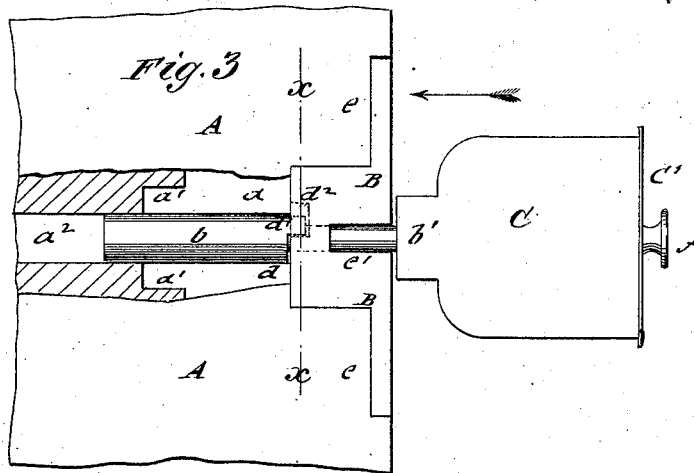
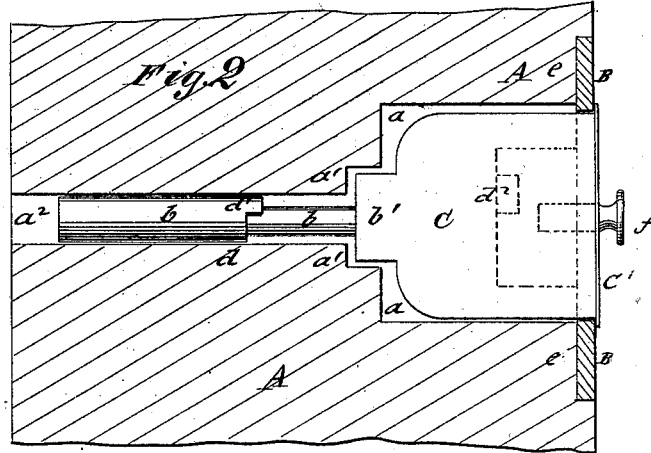
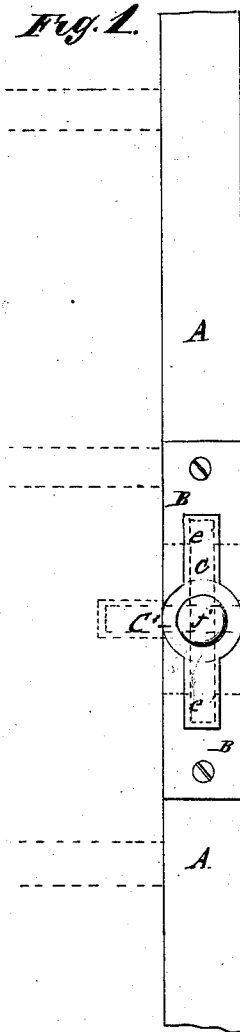


J. C. THOMAS,  
Shelf Step or Bracket.

No. 201,721.

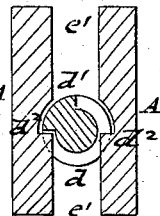
Patented March 26, 1878.

Fig. 1.



WITNESSES:

*A. W. Almqvist*  
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INVENTOR:

*J. C. Thomas*  
BY *Merrett*

ATTORNEYS.

# UNITED STATES PATENT OFFICE.

JOSEPH C. THOMAS, OF MILROY, INDIANA.

## IMPROVEMENT IN SHELF STEPS OR BRACKETS.

Specification forming part of Letters Patent No. **201,721**, dated March 26, 1878; application filed September 14, 1877.

*To all whom it may concern:*

Be it known that I, JOSEPH C. THOMAS, of Milroy, in the county of Rush and State of Indiana, have invented a new and useful Improvement in Shelf Steps or Brackets, of which the following is a specification:

In the accompanying drawing, Figure 1 represents a front view of a shelf with my improved sliding step or bracket. Fig. 2 is a sectional side elevation of the step, showing the same pushed into the upright of the shelving. Figs. 3 and 4 are a horizontal section and a side view of the step, showing it drawn out for use; and Fig. 5 is a vertical transverse section of the step on line *x x*, Fig. 3, showing connection with front casting.

Similar letters of reference indicate corresponding parts.

This invention relates to an improved shelf step or bracket, which is to be used as a substitute for the old-style step-ladder in business-rooms, &c. The step is always in place when needed, drawn quickly out for use, and pushed back out of the way when not in use.

The step may also be used as a substitute for brackets in show-windows, &c., for the display or support of articles, or for the support of temporary shelving, and for other purposes.

The invention consists of the combination of the mortised upright between shelving or drawers with a sliding and turning step, that is retained, when drawn out, by a recessed shaft and recessed casting in horizontal position for use, or in vertical position when pushed back into the mortise of the upright.

Referring to the drawing, A represents an upright, pillar, or other support between shelving or drawers, or on show-windows, which upright, &c., is provided with a vertical guide-mortise, *a*, that is extended backward, so as to form first an angular recess, *a*<sup>1</sup>, and then a round socket-hole, *a*<sup>2</sup>, in which the shaft *b* of the shelf-step C is guided.

The mortise *a* serves to store the step C when the same is pushed in, while the socket-extension *a*<sup>2</sup> serves to guide and direct the step when being drawn out or pushed back, also to give strength and support when the step is drawn out for use and the weight of a person rests thereon.

An angular rear part, *b*<sup>1</sup>, of the step D fits into the extension-recess *a*<sup>1</sup> of the mortise when the step is pushed in, to be out of the way, as shown in Fig. 2. The shaft *b* is provided with a shoulder, *d*, for preventing the shaft from being withdrawn too far when preparing the step for use.

A stop, *d*<sup>1</sup>, of the shoulder *d* enters side recesses *d*<sup>2</sup> of a front casting, B, so as to prevent the step, when the same is drawn out and turned, from turning beyond the vertical position in which the step is shoved in or beyond the horizontal position in which the step is used.

The casting B is attached by face flanges or extensions *e* to the upright, and provided with a vertical guide-slot, *e*<sup>1</sup>, for the step, a lateral mortise, *e*<sup>2</sup>, serving to receive the angular part *b*<sup>1</sup> of the step, when the same is drawn, turned, and then pushed back. The angular part *b*<sup>1</sup> is equal in width to the thickness of the upright, so as not to project beyond the same. The casting B thus supports the step firmly and rigidly in position for use, and admits the ready release of the step from the recess of the casting, and the turning and pushing back of the same after use.

The step has a cap, C', fastened to its front end, for hiding the slot and recess of the casting when the step is not in use, the cap having a button or knot, *f*, by which the step is readily manipulated.

By arranging a number of steps in the uprights of shelves, &c., any part of the same may be reached with great facility without the use of the cumbersome step-ladder, the step being pushed back again after use, so as to present no unsightly appearance, as only the closing cap and the button are visible.

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

1. The combination, with the mortised upright or other support of shelves, &c., of a sliding and turning step or bracket that may be drawn out for use as a step or support, or pushed back out of the way, substantially as and for the purpose set forth.

2. The combination of a mortised upright, A, having slotted and recessed front casting

B, with a sliding and turning step, C, having guide-shaft *b*, substantially as and for the purpose specified.

3. The upright A, having a mortise, *a*, extension-recess *a*<sup>1</sup>, and shaft-socket *a*<sup>2</sup>, in combination with the sliding and guided shelf C, having angular rear part *b*<sup>1</sup> and shaft *b*, substantially as described.

4. The combination of mortised upright A and casting B, having center slot and side recesses *d*<sup>2</sup>, with the shelf C, having shaft *b*, with

shoulder *d* and stop *d*<sup>1</sup>, substantially as set forth.

5. The combination of the mortised upright A and casting B, having lateral recess, with shelf C, having rear part *b*<sup>1</sup> and shaft *b*, to support the step in horizontal position for use, substantially as specified.

JOSEPH C. THOMAS.

Witnesses:

JAMES COREY,  
SAML. H. RILEY.