

(No Model.)

T. K. THOMPSON.

SHUTTER FASTENER.

No. 371,641.

Patented Oct. 18, 1887.

Fig. 1.

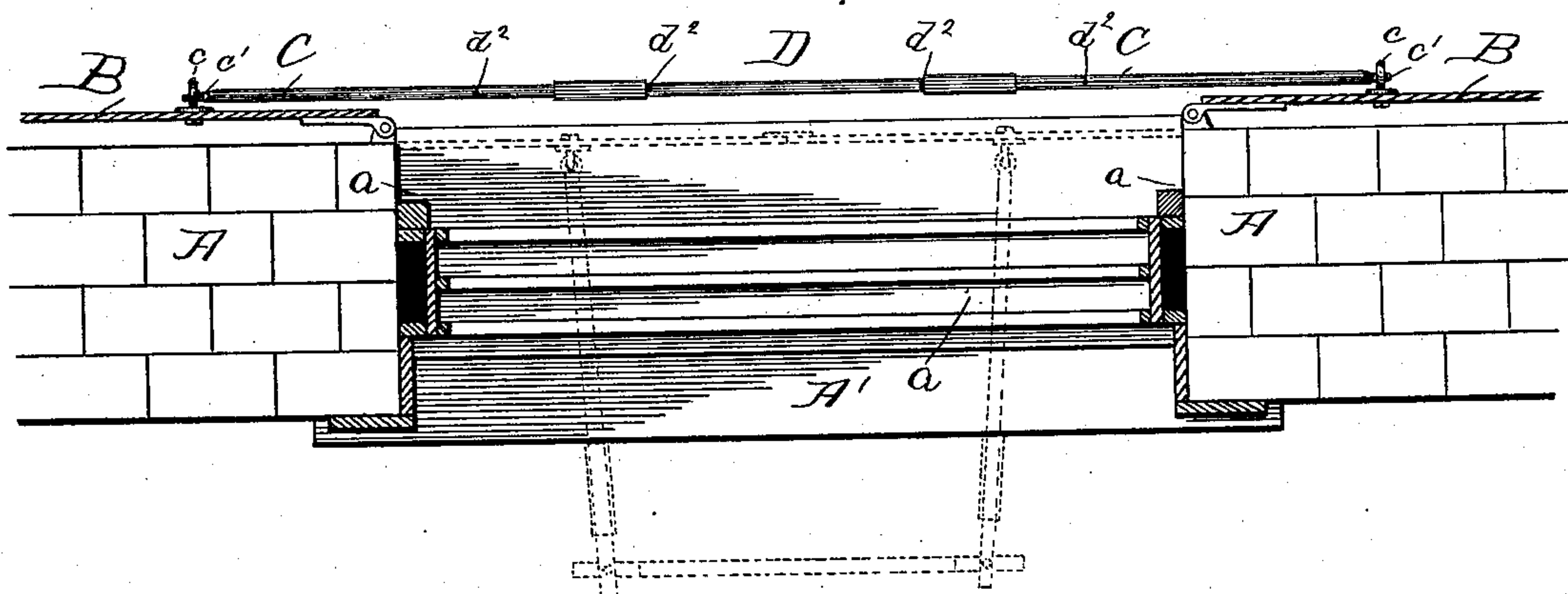


Fig. 2.

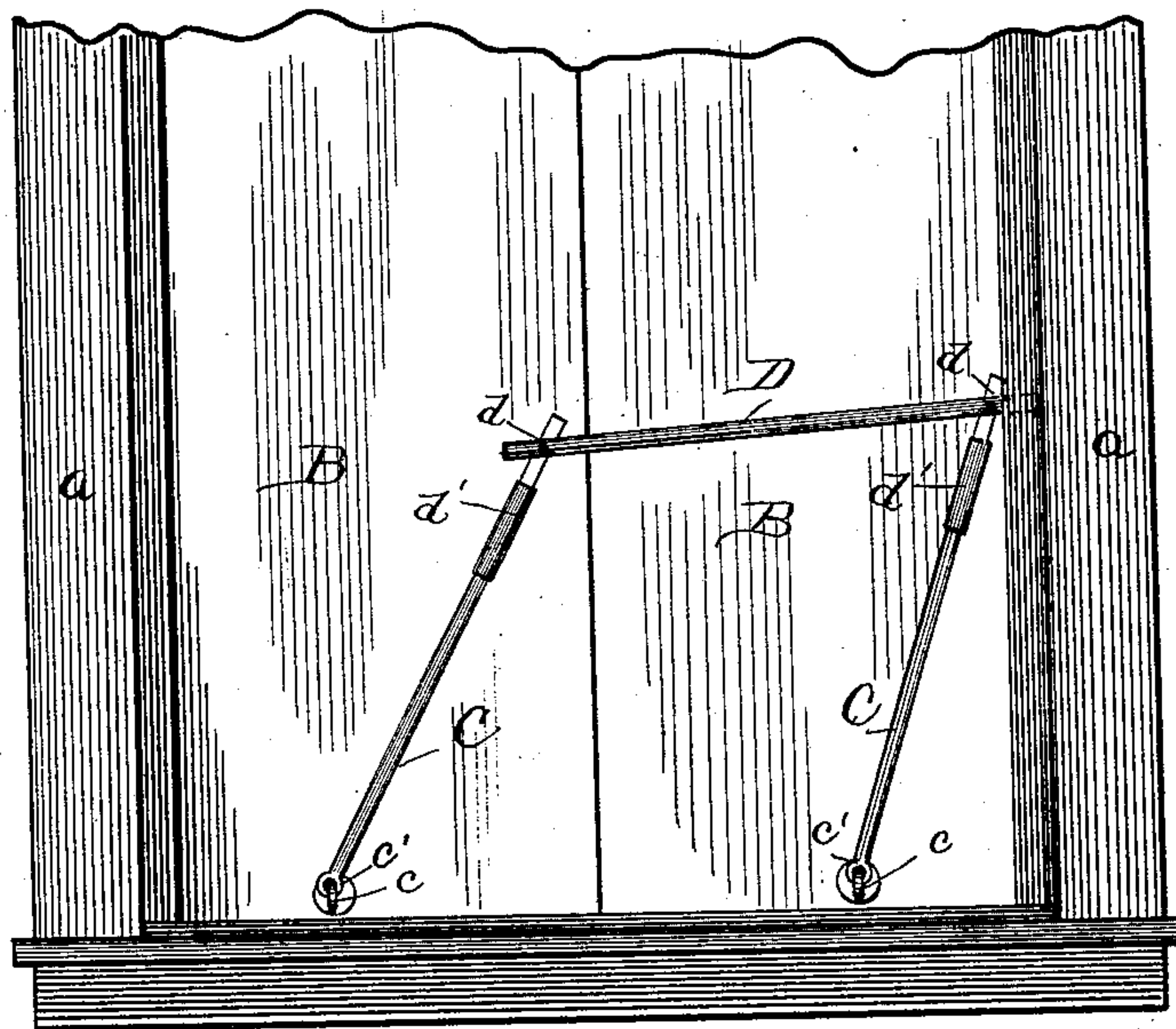


Fig. 3.

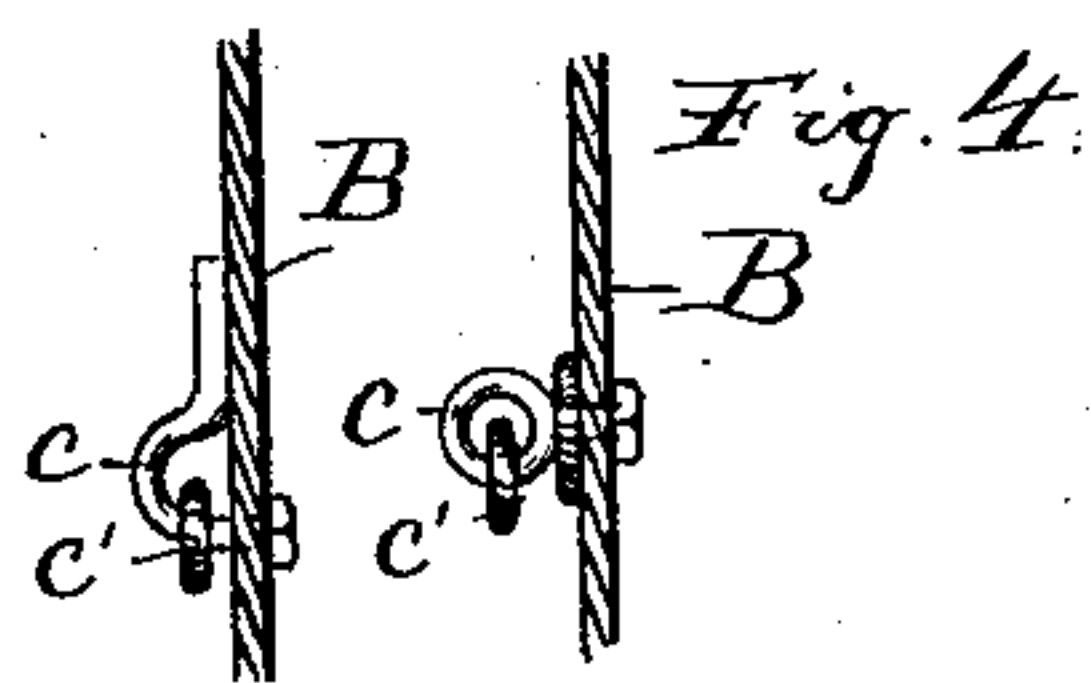


Fig. 4.

Witnesses:

Lew. C. Curtis.

A. W. Munday.

Inventor:

Thomas K. Thompson.

By Munday, Curtis & Alden,
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UNITED STATES PATENT OFFICE.

THOMAS K. THOMPSON, OF CHICAGO, ILLINOIS, ASSIGNOR TO HERBERT A. STREETER, OF SAME PLACE.

SHUTTER-FASTENER.

SPECIFICATION forming part of Letters Patent No. 371,641, dated October 18, 1887.

Application filed January 31, 1887. Serial No. 226,025. (No model.)

To all whom it may concern:

Be it known that I, THOMAS K. THOMPSON, a citizen of the United States, residing in Chicago, in the county of Cook and State of Illinois, have invented a new and useful Improvement in Blind or Shutter Fasteners, of which the following is a specification.

My invention relates to blind-fasteners for opening and closing heavy sheet-metal hinged blinds, with which buildings in cities are usually provided as a protection against fire, &c.; and my invention relates more particularly to improvements upon blind-fasteners of the kind shown and described in Letters Patent No. 70,726, of November 12, 1867, granted to G. Lightfoot, and wherein hinged bars are pivotally connected together and to the hinged blinds, such bars having rigid joints, when extended straight, to hold the blinds open. Heretofore but a single pair of these hinged bars have been employed, and difficulty is experienced in their practical operation because of the bars shutting together at their hinge, and thus endangering the hands of the operator, especially where the blinds are being opened or closed during strong winds. Where but a single pair of hinged bars is used, the operator in opening or closing the blinds is required to take hold of the same near the hinge or pivot which connects the two bars together at their ends.

My invention consists in employing three hinged bars, two of which are pivotally connected to the blinds, and the middle one of which is pivoted to the outer ends of the other two bars, and thus serves as a handle for the operator and to prevent the other bars closing together. This combination of the middle bar with the other two also permits the bars, when the blinds are closed, to swing sidewise and rest secure out of the way against the ledges of the window-frame.

In the accompanying drawings, which form a part of this specification, and in which similar letters of reference indicate like parts, Figure 1 is a horizontal sectional view of a window, showing my device in plan as extended for holding the blinds open, and also showing the same in dotted lines in position for opening the blinds. Fig. 2 is a side elevation showing the position of the fastener

when the blinds are closed, the same being an inside view, the window or sash being removed for convenience of illustration. Fig. 3 is a vertical sectional view of a portion of the blind, showing the staple by which the bar is pivotally connected thereto; and Fig. 4 shows another form of staple which may be used.

In said drawings, A represents the walls of a building, A' the window, and a the window-frame or a portion thereof.

B B are the hinged sheet-iron blinds or shutters, C C are a pair of bars pivotally connected by the staples c c to the blinds B B, and D is an intermediate bar connecting the inner ends of the bars C C by hinged or pivotal joints d d. These joints are furnished with means for rendering them rigid when the three bars are extended to hold the blinds open. A convenient means for rendering the bars rigid, and which I ordinarily employ, consists of sliding sleeves or pipes d' d', which may be slipped over the meeting ends of the bars C D or their hinged joint. The form of the hinged joint itself may, however, constitute the means for rendering such joint rigid when the bars are extended, as is shown and described, for example, in said Patent No. 70,726. Little pins or projections d² d² on the bars C D may serve to limit the longitudinal movement of the sleeves d' d'.

In operation, to close the blinds the sleeves d' d' are first slipped off of the hinged joints uniting the bars C D C, and then the bars C D should be rotated slightly on their axis, so as to bring the eyes e' e' of the bars C C, and which unite such bars to the staples c c, into an approximately horizontal plane, so that the bars C C will swing readily on said staples as pivots, and then the operator, by pulling directly inward on the handle-bar D, will easily close the blinds, the bars C C serving as levers to turn the blinds on their hinges as fulcras. When the blinds are thus swung closed, the fastener-bars C C D will occupy the position shown in dotted lines in Fig. 1, thus projecting through the open window, and the bars are then raised or swung into a vertical plane and then tilted slightly to one side, so that one end of the bar D may rest against the ledge or shoulder a

formed by the window-frame outside of the window, and between the window and the closed blinds. The window may then be closed.

I do not herein claim, broadly, as my invention the three folding fastening-bars provided with means for rendering their joints rigid when extended, as that I believe to have been first invented by William B. Avery.

I claim—

10 1. The combination, with hinged blinds B B, having vertically-extending staples *c c*, axially rotatable fastener-bars C C, having eyes *c' c'* pivotally connecting said bars with said staples, middle or handle bar, D, jointed to said
15 bars C C, and means for rendering the joints uniting said three bars rigid when the same are extended for holding the blinds open, said staples *c c* and eyes *c' c'* serving both to piv-

otally connect the bars C C to the blinds and to permit the axial rotation of said three bars 20 to bring their joints or pivots into position for pulling or pushing the folding bars horizontally through the open window, substantially as specified.

2. The combination of hinged blinds B B 25 with fastener-bars C C, pivotally connected thereto, middle or handle bar, D, jointed to said bars C C, and sliding sleeves *d' d'*, for rendering the joints of said bars rigid when the bars are extended for holding the blinds 30 open, substantially as specified.

THOMAS K. THOMPSON.

Witnesses:

H. M. MUNDAY,
LEWIS E. CURTIS.