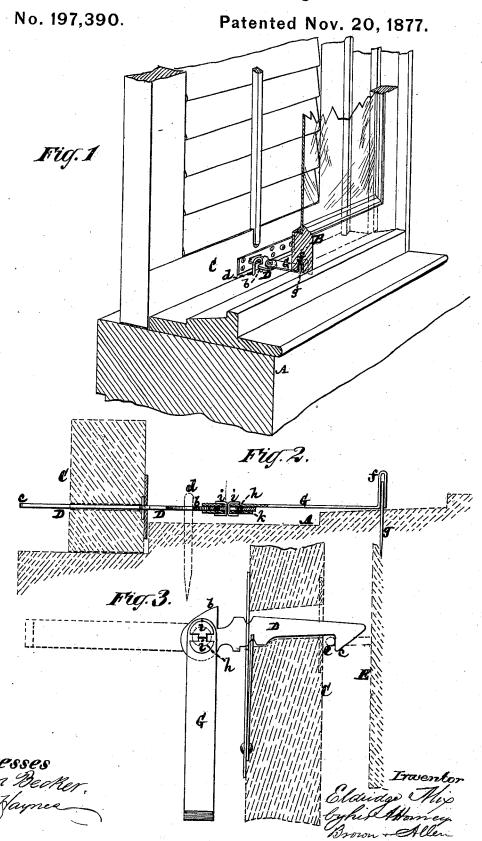
E. MIX. Shutter-Fastening.



## UNITED STATES PATENT OFFICE.

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## IMPROVEMENT IN SHUTTER-FASTENINGS.

Specification forming part of Letters Patent No. 197,390, dated November 20, 1877; application filed September 12, 1877.

To all whom it may concern:

Be it known that I, ELDRIDGE MIX, of Orange, in the county of Essex and State of New Jersey, have invented a new and useful Improvement in Blind-Fastenings, of which the following is a description, reference being had to the accompanying drawings, forming

part of this specification.

This invention relates to that description of fastenings for the outside blinds or shutters of windows in which a spring double hook for holding said blinds open or closed is used, and in which said hook has combined with it a bar or attachment for manipulating or releasing the hook when the lower one of a pair of window-sashes is raised, and for locking or holding the blind when hooked and closed by the shutting down of the lower sash.

The invention consists in a certain construction of the hook manipulating and locking bar, whereby said bar is made capable of engaging not only with a stationary pin or sta-ple in the window frame or sill, but also with the lower sash itself when the latter is closed, thus not depending exclusively upon the pin or staple, which is apt to be bent or work loose, and other advantages are obtained.

The invention also consists in a combination, with the spring double-hook blind-fastening and attached locking bar, of a flexible clamp for uniting said bar with said hook, whereby said bar may be readily applied to hook-fastenings for outside blinds and shutters now in use.

Figure 1 is a sectional perspective view of a lower window-sash, window-frame, and a blind in part, with my invention applied, and showing said sash as locking the blind when closed. Fig. 2 is a vertical section, upon a larger scale, of the same in part, but showing the locking bar as engaging with a staple to hold the blind closed when the sash is raised; and Fig. 3, a horizontal section, showing the blind as thrown back, and its hook-fastening as engaged with the staple in the outside wall.

A represents the window-frame in part; B, the lower sash; and C, a hinged outside blind, provided with an ordinary spring double-hook fastening, D, the lips or noses b c of which engage, respectively, with a staple, d in the window-frame or staple e in the outside wall E, acdow-frame or staple e in the outside wall E, accordingly as said blind is closed or thrown open. The locking-bar G, when united with the eye h of the hook D, by one or more flexible

Pivoted to the inner end of the hook-fastening D is a flat locking-bar, G, of a suitable length, so that when straightened out in line with the hook, after the blind C has been closed and fastened by the hook's engagement with the staple d, said bar, which rests on the window-frame, is clamped between the latter and the bottom of the lower sash B as said sash is lowered or closed, and is made to engage with said sash to lock the blind in its closed position. Thus the free or swinging end of said bar is constructed with a turned-up lip, f, which, when the sash B is lowered, enters a cavity in the bottom thereof, as shown in Fig. 1. Said lip is doubled or bent over, thereby giving it a hollow or inverted **U** form, which not only adds to its strength, but provides for its engagement with a staple, g, in the window-frame, to lock the blind when the latter is closed and the lower sash is raised, as shown in Fig. 2.

The engagement of the locking bar with the lower sash when the latter is closed insures a firmer and more secure lock of it than does a mere engagement of it with the staple or pin in the window frame or sill. This locking-bar G also serves as a handle by which to manipulate the hook-fastening D to release the latter's engagement with its staples, and is pivoted to the inner end of the hook or fastening D to facilitate such use of it, and to provide for its being closed against or into proximity with the blind when the latter is thrown back and its hook engages with the staple c in the outer wall, as shown in Fig. 3. Said lockingbar G may either be permanently pivoted to the double hook D, and form one of the elements of the fastening as exposed for sale or put upon the market, or it may be separately and afterward applied; and may be readily and very conveniently attached to those hook-fastenings now in use, which have a finger-hole or eye, h, in their inner ends, by means of one or more flexible clamps or clips, i, passed through a slot in the bar G, through the eye h in the hook, and through a slot in a back or under washer k, and the entering ends of the clamp or clamps afterward bent over or down to secure such pivoted union of the locking-bar with the hook.

clamps or clips, *i*, and washers *k*, as hereinbefore described, need not necessarily be formed with a turned-up or doubled and turned-over portion *f* at its locking end, but may be otherwise constructed to engage with the staple or projection on the window sill or frame and with the lower sash, or either.

I claim—

I claim-

1. The pivoted locking-bar G, having its turned-up portion or lip f doubled or turned over to provide for its engagement either

with the window each or with a projection or staple, g, in the window frame, or with both, substantially as shown and described.

2. The combination, with the hook D, having an eye, h, of the locking-bar G and one or more flexible clamps or clips, i, and washer k, essentially as specified.

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Witnesses:

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