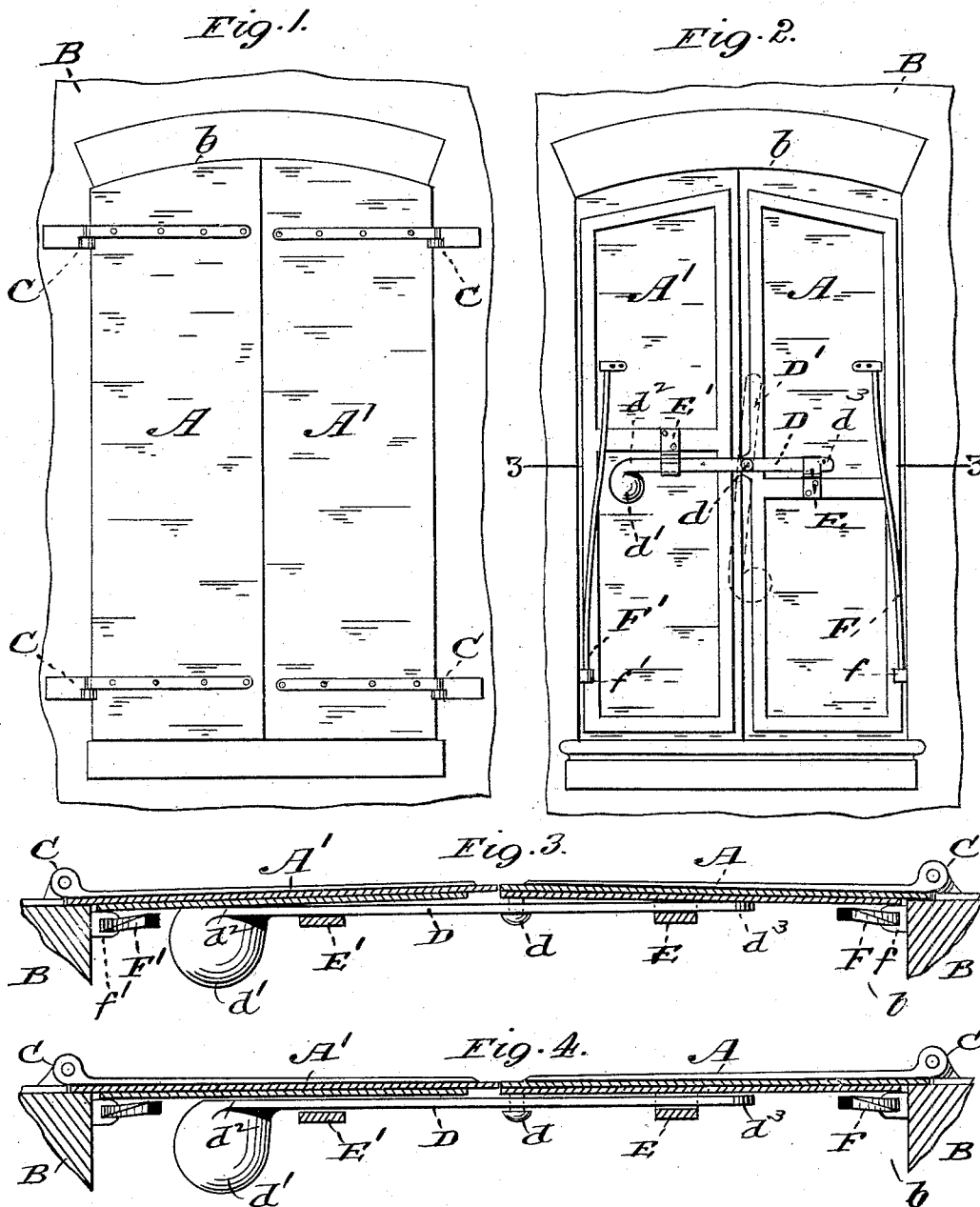


(No Model.)

W. H. DAILEY.
SHUTTER FASTENER.

No. 463,104.

Patented Nov. 10, 1891.



WITNESSES

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INVENTOR

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UNITED STATES PATENT OFFICE.

WILLIAM H. DAILEY, OF ST. LOUIS, MISSOURI.

SHUTTER-FASTENER.

SPECIFICATION forming part of Letters Patent No. 463,104, dated November 10, 1891.

Application filed April 17, 1891. Serial No. 389,299. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM H. DAILEY, of St. Louis, Missouri, have made a new and useful Improvement in Shutter-Fasteners, of which the following is a full, clear, and exact description.

In carrying out this improvement no fastening is required upon the outer side of the shutters when closed. A bar, which when free turns into or toward a vertical position, is pivoted to one of the shutters at the inner side thereof, and to fasten the shutters the bar is turned into engagement with keepers upon the two shutters, respectively, and the shutters, by any suitable means, are held or forced to bind the bar frictionally in the keepers and sufficiently to prevent it from turning out of engagement therewith. As long as the bar is thus confined in the keepers the shutters remain fastened; but by striking the shutters sharply upon the outer side thereof, or by pushing them sufficiently inward to overcome the force which causes the locking-bar to be held as described, the bar is released and automatically turns into a position in which it is out of engagement with the keepers and the shutters are free to swing open, all substantially as is hereinafter set forth and claimed, aided by the annexed drawings, making part of this specification, and exhibiting the most desirable mode of carrying out the improvement, and in which—

Figure 1 is an outside view of a pair of closed shutters having the improved fastening; Fig. 2, an inside view of the same; Fig. 3, a horizontal section on the line 3 3 of Fig. 2, the parts being as when the locking-bar is held frictionally in the shutter-keepers; and Fig. 4, a similar section, but the parts being relatively arranged, as when the shutters have been pressed inward to release the locking-bar. The last two named views are upon an enlarged scale.

The same letters of reference denote the same parts.

The shutters A A' are of the usual construction, and are hung and operated in the ordinary manner, saving as the construction and operation are modified by the improvement under consideration.

B represents the wall of the building, and b

the window-opening therein to which the shutters are applied.

The shutter-hinges are shown at C C.

The preferable form of locking-bar is represented at D. It is pivoted at *d* to one of the shutters—say the shutter A—and it is weighted at *d'* or otherwise constructed to render it unbalanced upon its pivot, so that it shall when free automatically turn into or toward an upright position, substantially as is indicated by the broken lines D', Fig. 2.

The preferable form of fasteners upon the shutters, respectively, for the locking-bar to coact with are the keepers E E'.

The preferable means for forcing the shutters to hold the locking-bar in the keepers are the torsional springs F F'. These springs are applied, preferably, at the inner side of the shutters, the springs at the lower end thereof being secured to suitable supports *f f'* upon the wall B or window-frame, and at the upper end thereof being attached to the shutters, respectively, substantially as shown. They (the springs) are also utilized as a means for throwing the shutters open after the locking-bar has been released.

The operation is as follows: The shutters being closed and the locking-bar being turned upon its pivot into engagement with the keepers, the springs act to press the shutters outward sufficiently to cause the locking-bar to be bound laterally in the keepers and, perhaps, at its ends *d² d³*, or elsewhere, against the shutters, and as long as the locking-bar is thus pressed laterally in the keepers, or against the shutters, or both in the keepers and against the shutters, it remains in engagement with the keepers and the shutters cannot open; but by applying a force to the shutters which counteracts and overcomes the force exerted by the springs, as described, the shutters (which are suitably constructed therefor) are turned inward sufficiently upon their hinges, as indicated in Fig. 4, to remove the described lateral pressure upon the locking-bar. The locking-bar now turns on its pivot into its position indicated by the broken lines D', and on withdrawing the force which has been applied to force the shutter inward, as described, the springs act to open the shutters.

The force needed for pressing the shutters inwardly to release the locking-bar, as described, is conveniently produced from a stream of water thrown from a fireman's hose-
5 pipe. In the preferable form of the improvement—the one exhibited in the drawings—all of the parts used in locking and opening the shutters are upon the inner side of the shutters when closed. This leaves the shutters
10 wholly free of projections upon the outer side thereof, and the weather cannot interfere with the proper working of the parts in question.

I claim—

15 The combination of the shutters, the unbalanced adjustable locking-bar, the keepers, and the springs for forcing the shutters outward, and thereby causing said locking-bar to

bind frictionally in said keepers, said locking-bar being pivoted to one of said shutters, said keepers being attached to said shutters, 20 respectively, and also being constructed and disposed to enable the lighter end of the locking-bar, when said bar is released, to rise from its keeper and the heavier end of the locking-bar to drop from its keeper, and said springs 25 being adapted to yield to a superior force applied upon the outside of said shutters, substantially as described.

Witness my hand this 14th day of April, 1891.

WILLIAM H. DAILEY.

Witnesses:

C. D. MOODY,

A. BONVILLE.