

(No Model.)

2 Sheets—Sheet 1.

L. MARKEY.  
SHUTTER FASTENER.

No. 433,688.

Patented Aug. 5, 1890.

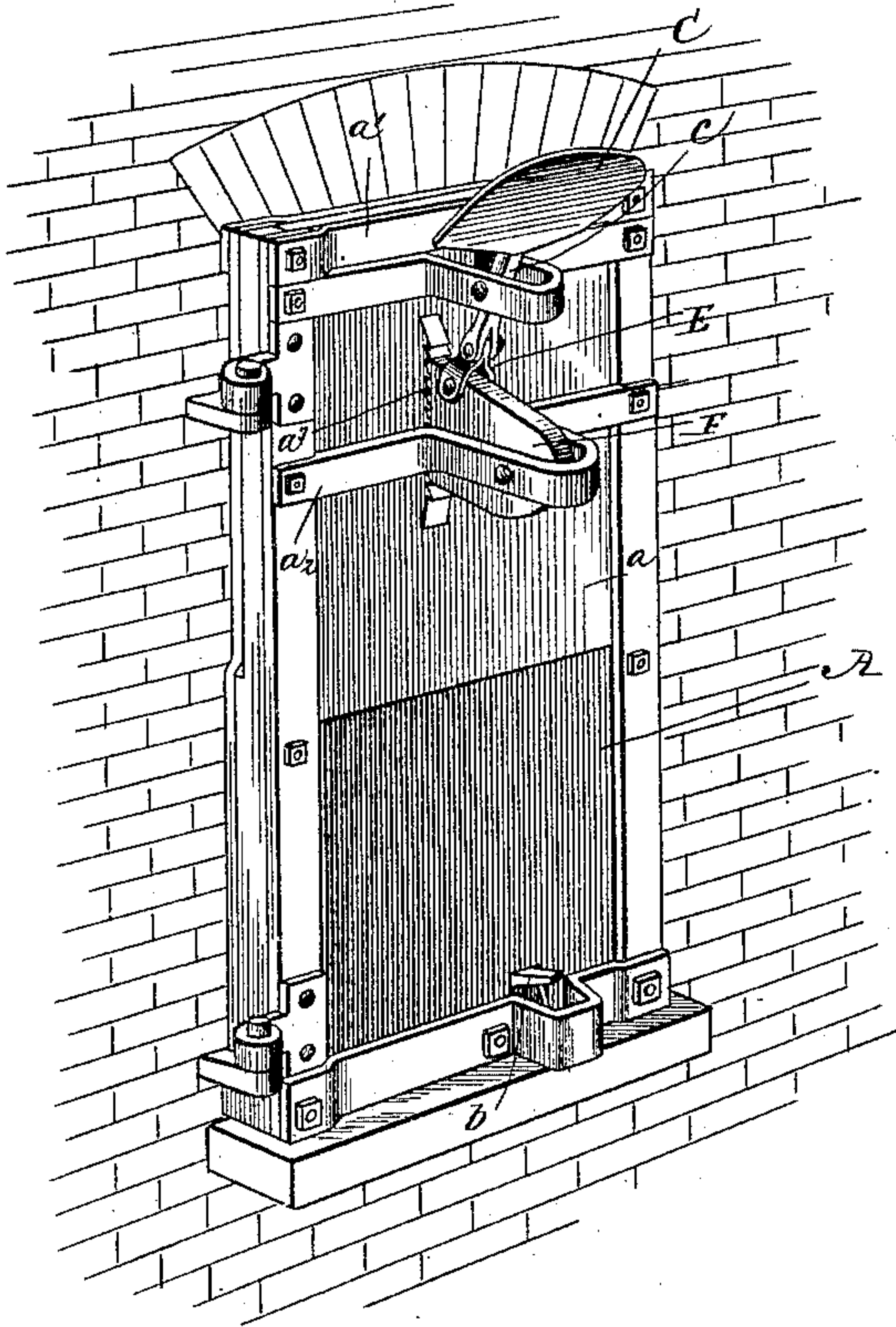


Fig. 1.

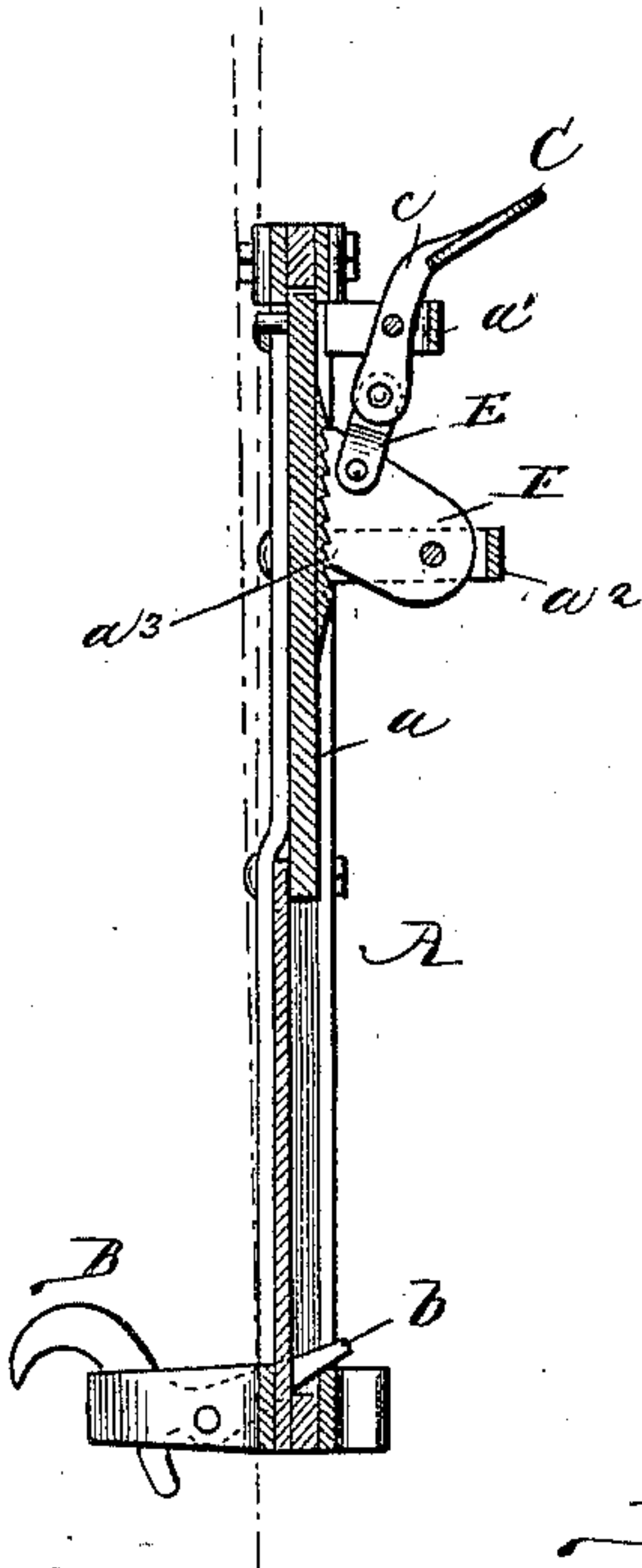


Fig. 2.

Witnesses  
W. Foster  
A. Carter

Inventor  
Laurence Markey  
By Chas. G. Page  
Atty

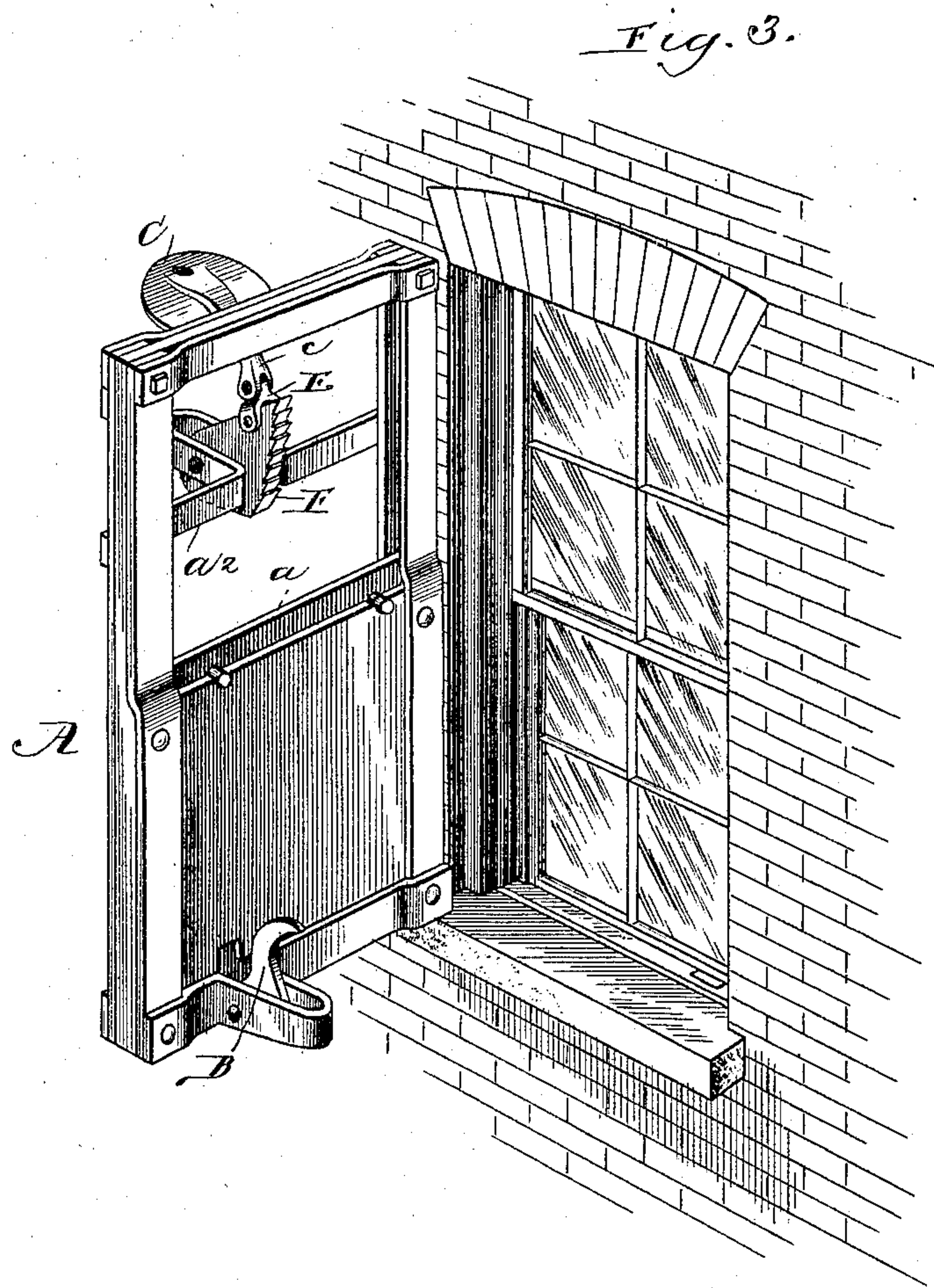
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2 Sheets—Sheet 2.

L. MARKEY.  
SHUTTER FASTENER.

No. 433,688.

Patented Aug. 5, 1890.



Witnesses  
*W. Paxton*  
*A. Coates*

Inventor  
*Laurence Markey*  
By *Chas. G. Page*  
Atty.



# UNITED STATES PATENT OFFICE.

LAURENCE MARKEY, OF CHICAGO, ILLINOIS.

## SHUTTER-FASTENER.

SPECIFICATION forming part of Letters Patent No. 433,688, dated August 5, 1890.

Application filed April 6, 1889. Serial No. 306,261. (No model.)

*To all whom it may concern:*

Be it known that I, LAURENCE MARKEY, a citizen of the United States, residing at Chicago, in the county of Cook and State of Illinois, have invented a certain new and useful Improvement in Shutters for Buildings, of which the following is a specification.

My invention relates to window-shutters, involving means for unfastening the closed shutter from outside the building, so that in case of fire the shutter can be unfastened and allowed to swing open.

The objects of my invention are to provide reliable means for unfastening the shutter, to insure access to the interior of the building, and to provide certain novel and improved details.

To the attainment of the foregoing and other useful ends my invention consists in matters hereinafter set forth, and particularly pointed out in the claims.

In the accompanying drawings, Figure 1 represents in perspective a shutter in a closed condition with my invention applied thereto. Fig. 2 is a section taken on a vertical central plane through Fig. 1. Fig. 3 represents in perspective the shutter of Fig. 1 in an open condition.

In said drawings, A indicates a shutter, which is preferably an iron shutter, although as a matter of course it could be made of other material. The shutter is provided with a catch B, so that when it is closed it can be locked by said catch. When catch B is released from such stop as may be employed to be engaged by the catch when the shutter is closed, the shutter will automatically swing open. In shutters of the class to which my invention pertains it has been proposed to cause a shutter when unfastened to swing open either by the action of a spring or by hanging the shutter slightly out of plumb, so that it shall swing open by gravity. I prefer the latter arrangement, since springs are apt to become inoperative by the action of heat.

As a means for tripping or releasing catch B from its allotted stop, I provide the shutter with drop or drop-slide  $a$ , so arranged that when it is desired to release the catch the drop-slide can be permitted to fall and engage the catch, which will be operated by the im-

pact of the drop. As a means for holding drop  $a$  in a raised position, I provide a latch F, by means of which the drop can be held in readiness for service.

The latch F can be operated by a lever  $c$ , which is accessible outside of the building when the shutter is closed. This lever is preferably provided with a broadened end C, against which a stream of water can be directed from below, so that by reason of the impact of the stream of water against said lever it may be operated in a way to cause the latch to release the drop, which will thereupon fall and release the catch. Lever  $c$  serves, therefore, as a latch-lever or handle, and while it can be thus operated by a stream of water, it can also be operated by the thrust of a pole in the hands of a fireman. It will be obvious to the skilled mechanic that various forms and constructions of latching or locking devices arranged for locking the drop in a raised position could be employed, and hence for the broader purposes of my invention I do not limit myself to the particular construction of latch or locking device herein shown. It is also obvious that a drop, broadly considered, can, by various means, be held in a raised position, and when so held be subject to the action of a movable broad-surfaced plate C, which when moved by the action of a stream of water against it will allow the drop to fall. As matters of further improvement in details, however, I have adapted the upper panel of the shutter to form the drop  $a$ , by which arrangement, should from any cause the shutter fail to swing open after the drop has fallen upon the catch B, the upper half of the window will be available through the space previously occupied by the drop  $a$ . This upper panel or portion of the shutter can be suitably guided by the shutter-frame, so that it may readily slide up and down, and an end  $b$  of the catch can be arranged so that it can be engaged by the drop when the latter has fallen to a suitable extent. Where the drop is formed by a sliding panel I find it convenient to pivotally support the latch by a cross-bar  $a^2$  of the shutter-frame, and to provide the latch with a toothed face which can engage a toothed-surface portion  $a^3$  of the drop  $a$ . The latch-lever  $c$  is shown pivotally supported by a cross-bar



*a'* of the shutter-frame and connected with the latch by a link E.

What I claim as my invention is—

1. A shutter having a fastening-catch and a detachably-suspended panel, said panel when detached falling and encountering and moving said catch.

2. A shutter having a fastening-catch provided with a projecting end portion *b* and a detachably-suspended panel, said panel when detached falling and encountering and moving said end portion *b*.

3. The combination, substantially as hereinbefore set forth, with a shutter and a catch for holding the shutter closed, of a sliding panel adapted to operate and release the catch by falling upon it, and a latch for holding the panel in a raised position, so that when the latch is released from the panel the latter can fall and release the catch.

4. The combination, substantially as hereinbefore set forth, with a shutter and a catch for holding the shutter closed, of a sliding

panel adapted to release the catch by falling upon it, a latch to hold the panel in a raised position, and a lever for operating the latch, for the purpose described.

5. The combination, substantially as hereinbefore set forth, with a shutter and a catch for holding the shutter closed, of a sliding panel to actuate the catch, a latch to hold the sliding panel in a raised position, and a lever for operating the latch, said lever being provided with a widened portion C, against which a stream of water can be directed, for the purpose described.

6. The combination of the shutter and a catch for holding the shutter closed, a drop to actuate the catch, a toothed latch E to hold the drop in raised position, and a lever *c* for operating said latch, substantially as described.

LAURENCE MARKEY.

Witnesses:

CHAS. G. PAGE,  
ANNIE COATES.