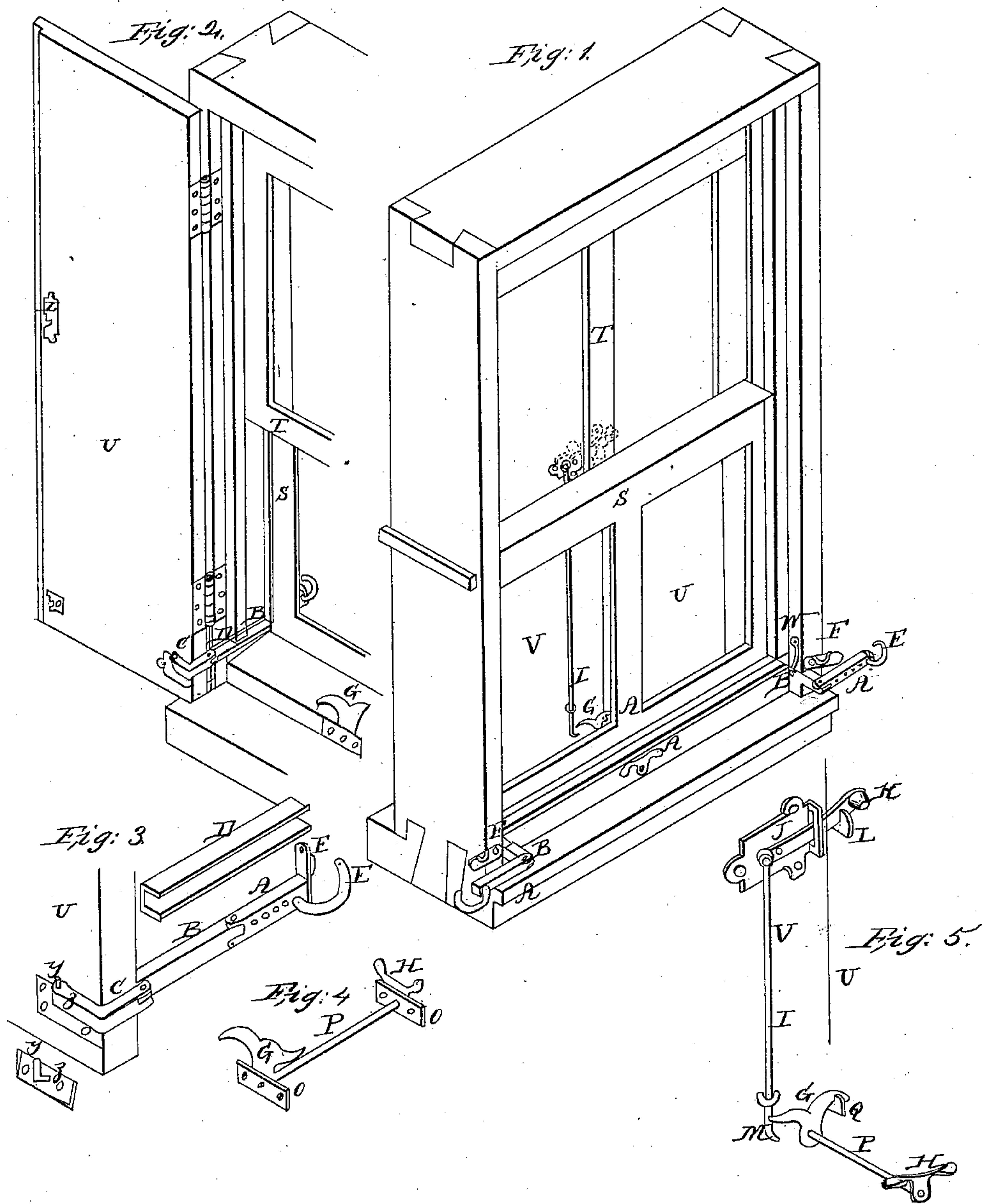


*J Ebner,*

*Shutter Worker.*

*N<sup>o</sup> 27,535.*

*Patented Mar. 20, 1860.*



*Witnesses:*

*S. G. Musser  
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*Inventor:*

*John Ebner*

# UNITED STATES PATENT OFFICE.

JOHN EBNER, OF LANCASTER, PENNSYLVANIA.

## SHUTTER-OPERATOR.

Specification of Letters Patent No. 27,535, dated March 20, 1860.

*To all whom it may concern:*

Be it known that I, JOHN EBNER, of the city of Lancaster, in the county of Lancaster and State of Pennsylvania, have invented  
5 a new and useful Combination for the Purpose of Opening, Closing, Bolting, and Unbolting Shutters Without Raising the Window Sash; and I do hereby declare that the following is a full, clear, and exact description  
10 of the devices employed and the operation of the same, reference being had to the annexed drawings, making a part of this specification, in which—

Figure 1, shows the application of the  
15 push and pull bolts, and tilter and drop bolt as seen on the inside when the shutters are closed. Fig. 2, shows one shutter opened back, as seen on the outside. Fig. 3 shows the metallic, sliding box, D, in which the  
20 joints A, B of the push and pull bolt, move in and out horizontally, the right angled joint C, of the bolt, being pivoted to the shutter. Fig. 4, shows the tilter H and two-  
beaked tilting bolt G on the connecting rod P, with its supporting plates O, detached  
25 from the central part of the lower edge over the window sill. Fig. 5, shows the same, in combination with the rod I, to operate the upper bolt K, attached to the shutter U.

30 The operation is as follows: The two joints A, B, of the push and pull bolt are adapted to the box D, which latter is inserted through the window casing (on each side when double shutters are used) near the  
35 base. The outer joint C, is hinged to a projecting tongue on the outer side of the joint B, and bent at right angles so as to embrace the edge of the shutter and a portion of the side, where it is affixed over a pivot  $y$ , on  
40 the plates  $z$ , as shown Figs. 2, 3. An open ring E, or some ornamental device is attached to the inner end A of the bolt, by which it is seized and thrust out or pulled in. One of the shutters (V,) has a central  
45 bolt with a weighted head K, pivoted, with a rod I, to its other end. This rod extends downward and is held by a staple through which it slides. The lower end of the rod I is bent out at M, and operated by the  
50 double beaked tilting bolt G. Thus when

the shutters are closed the headed bolt K, drops into its catch L, and a touch on the tilter H, inside, will also bolt the shutter beneath in the catch Q. Both catches are  
shown by Fig. 2. The ends A of the side 55 or sliding bolts are turned out of the way and the shutters are firmly secured. In order to open the same, by touching the other side of the tilter H, the one beak of G is withdrawn from its catch Q, and the 60 other end comes in contact with the hook M on the rod I, and unbolts K, also; by bringing the joints A in a line with the joints B of the openers and closers on either side, by  
a push the shutters are opened outward 65 against the sides of the wall (R, Fig. 1,) and the combined joints A, B, C, are of such a length, that when opened to their full extent the square end of the joint A is just even with the inside casing, on which over 70 each bolt, there is a pivoted stay plate F, turned down against it so that the bolt cannot yield and thereby keeps the shutter fastened back. Should it be desirable to bow  
the shutters, a side catch W can be applied 75 so as to fix the bolt at any desired point or points; for closing, the stay plates F are turned off, and the bolts drawn in, when the upper bolt K, will fall into its catch,  
and the beak of G tilted into its catch as 80 aforesaid.

This simple arrangement can all be made of neat castings and applied to any shutters hinged and overlapping each other in the  
ordinary manner without looking unseemly 85 and at a trifling cost, being perfectly secure and easily operated. Thus in rainy or blustery weather, or when the window is obstructed with flower pots or what not, the disagreeable necessity of hoisting the sash 90 (often heavy) and reaching out to unfasten the shutters is avoided, without enumerating other important considerations that will recommend these simple devices to house  
holders. 95

I am aware that jointed bolts, provided with cogs or screws have been employed in combination with peculiar hinges to the shutters, but I am not aware of any devices substantially like those set forth. 100



What I claim as my invention and desire to secure by Letters Patent is—

The push and pull bolt with its joints A, B, C and sliding box D, pivot *y* on the  
5 plate *z*, attached to the shutter, the weighted bolt K, operated on a pivot by the rod I, with its hook M, and the double beaked

tilter G, and H on the rod P, the stay plates F when combined substantially as herein set forth for the purpose specified.

JOHN EBNER.

Witnesses:

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JEROME BAUMGARTNER.