No. 620,058.

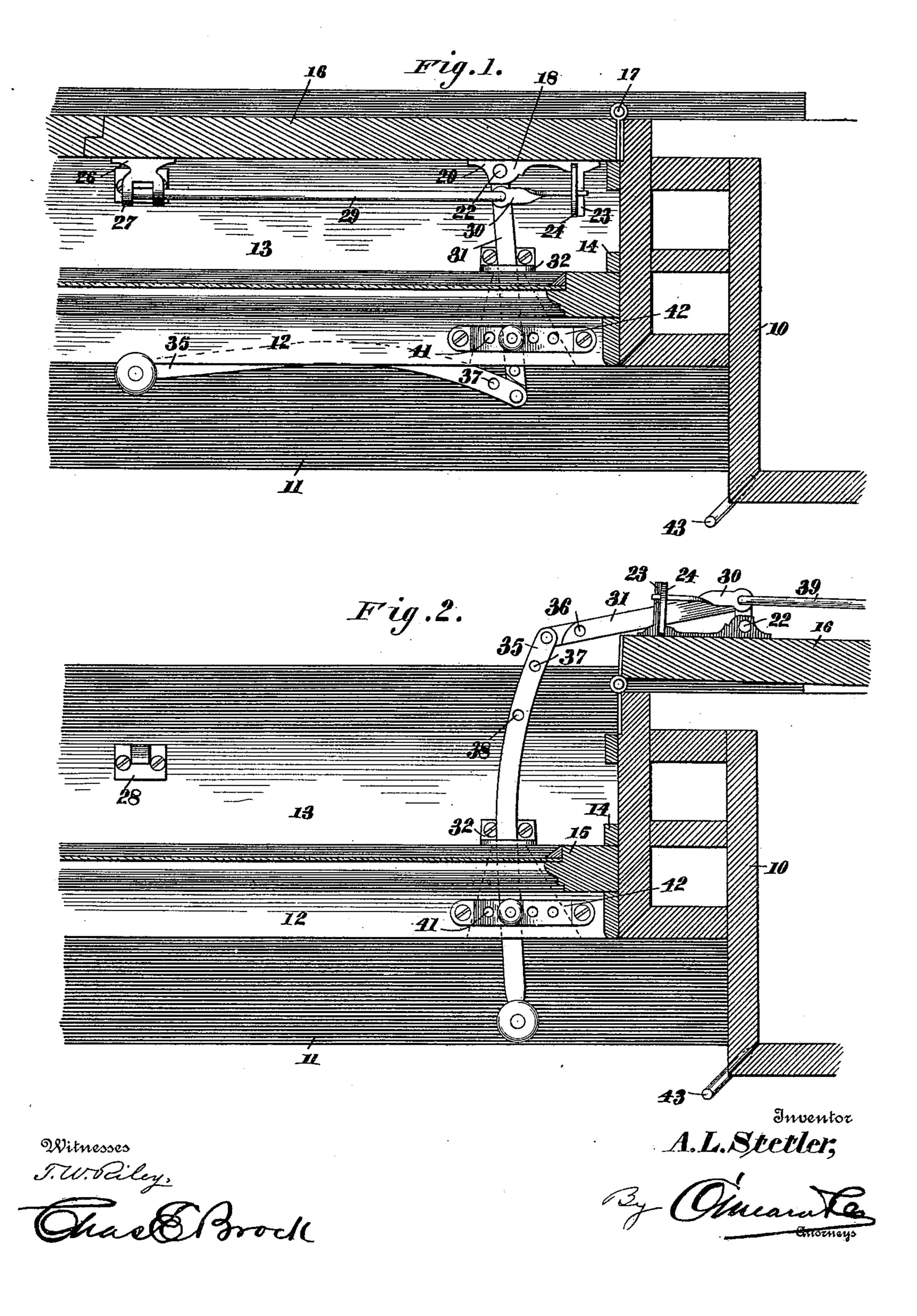
Patented Feb. 21, 1899.

## A. L. STETLER. SHUTTER FASTENER.

(Application filed July 16, 1898.)

(No Model.)

2 Sheets-Sheet 1.



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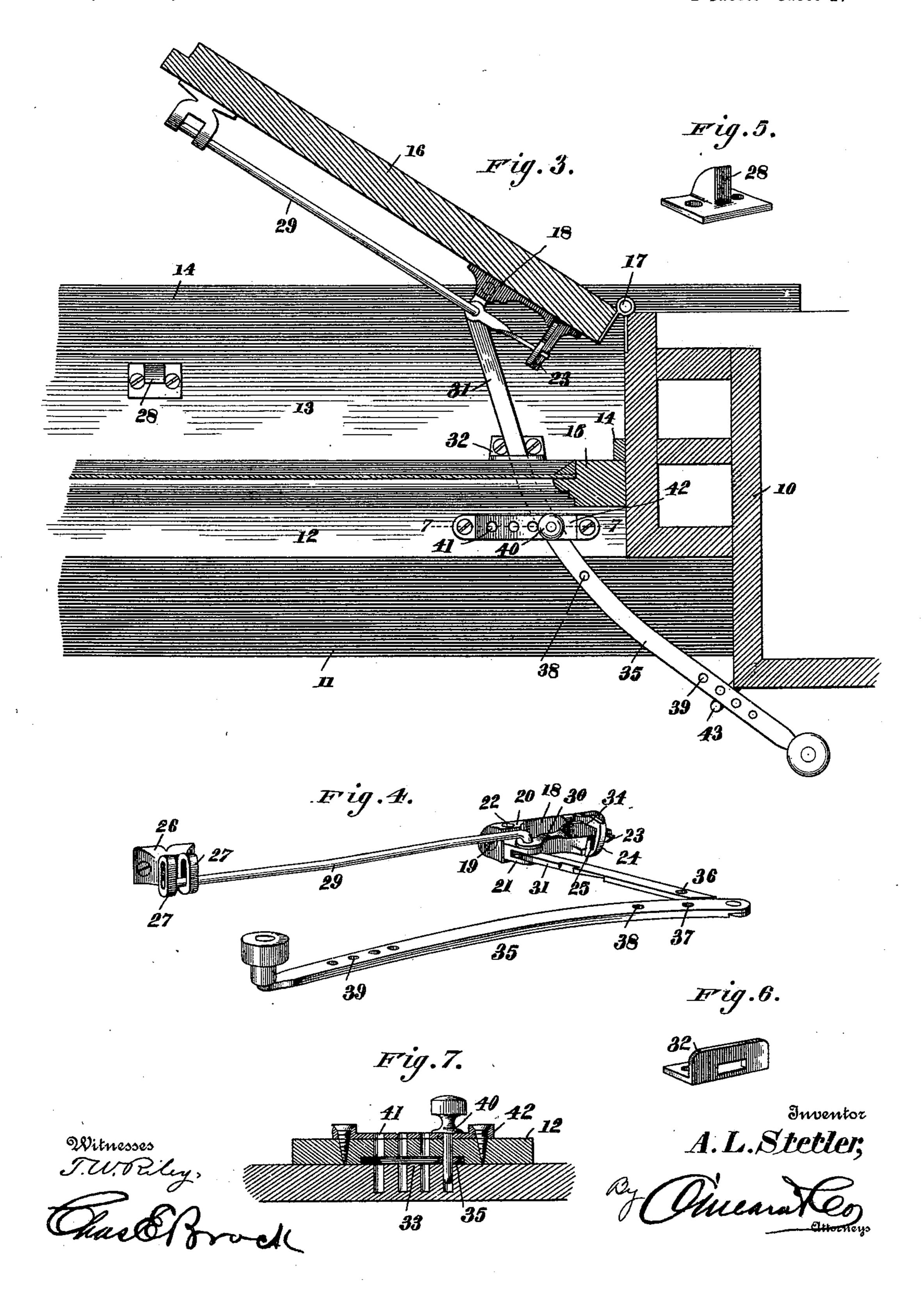
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## United States Patent Office.

ALBERT L. STETLER, OF ALLENTOWN, PENNSYLVANIA.

## SHUTTER-FASTENER.

SPECIFICATION forming part of Letters Patent No. 620,058, dated February 21, 1899.

Application filed July 16, 1898. Serial No. 686,194. (No model.)

To all whom it may concern:

Be it known that I, ALBERT L. STETLER, residing at Allentown, in the county of Lehigh and State of Pennsylvania, have invented a new and useful Shutter-Fastener, of which the

following is a specification.

My invention relates to shutter-fasteners, and has for its object to provide simple, cheap, and efficient means whereby outside shutters may be unlocked and opened by the manipulation of a lever projecting into the inside of the room without the necessity of raising the window, the same mechanism being adapted to lock the shutter either closed or opened or bowed at one or more intermediate angles.

With this object in view my invention consists in the improved construction, arrangement, and combination of parts hereinafter fully described and afterward specifically

20 pointed out in the claims.

In order to enable others skilled in the art to which my invention most nearly appertains to make and use the same, I will now proceed to describe its construction and operation, reference being had to the accompanying drawings, forming part of this specification, in which—

Figure 1 is a horizontal sectional view through one side of the frame and sash and one shutter of a window, giving a top plan view of my invention, the shutter being shown in its closed position. Fig. 2 is a similar view showing the shutter in its open position. Fig. 3 is a similar view showing the shutter bowed or secured partly open. Fig. 4 is a detail perspective view of the operating mechanism detached. Fig. 5 is a detail perspective view illustrating the shutter-catch on the subsill detached. Fig. 6 is a detail perspective view of the bracket through which the operating-

o of the bracket through which the operatinglever slides. Fig. 7 is a detail sectional view on the dotted line 7 7 of Fig. 2.

Like numerals of reference mark the same parts wherever they occur in the various figures of the drawings.

Referring to the drawings by numerals, 10 indicates one side of the window-frame, which may be of any approved construction.

11 indicates the sill; 12, the sash-strip; 13, 50 the subsill; 14, the dividing-bead; 15, the sash, and 16 the shutter at one side, hinged at 17 to the frame.

18 indicates a cast bracket secured to the inner side of the shutter on a level with the subsill 13 and near the hinge 17 by screws 55 19. In a recess in the face of the bracket and partially between lugs 20 thereon is pivoted a bifurcated block 21 by means of a vertical pin 22. Projecting inwardly at the opposite end of the bracket 18 is an arm 23, and 60 pivoted alongside of this arm in a vertical recess in the bracket 18 is a gravity latch-hook 24, vertically slotted at 25. Near the outer edge of the shutter slightly above the subsill is a bracket 26, provided with vertical 65 bifurcated slotted arms 27, the space between said arms serving to accommodate a catch 28, secured to the subsill in line therewith.

29 indicates a steel rod adapted to slide vertically and longitudinally in the slots of 70 arms 27, the opposite end of said rod being bent downward at a right angle and serving as a pivot to attach a sliding latch 30 to the pivoted bifurcated block 21, the latch lying on top of the block. The same pivot connects 75 a bar 31 between the bifurcated ends of block 21, the bar passing inward through a slotted bracket 32, (see Fig. 6,) secured to the subsill just outside of the sash, and through a space 33, formed under the sash-strip 12, as shown 80 in Fig. 7. The outer end of the latch 30 is turned to a vertical position to pass through slot 25 of latch-hook 24 and has its outer upper edge beveled, as at 34, to cause it to raise the latch-hook as the latch slides outwardly, 85 with its outer end resting on top of the arm 23.

To the inner end of bar 31 is pivotally attached a curved handle-bar 35, their pivotal jointed ends being halved, so as to permit the joint to pass freely through the slot in 90 the bracket 32 and the space 33 under the sash-strip 12. The bar 31 and pivoted handle-bar 35 are provided with perforations 36, 37, 38, and 39 to receive a locking-pin 40 when in register with perforations 41 in a strip 42, 95 secured to the upper face of the sash-strip in vertical alinement with the space 33 thereunder.

A hook 43, projecting inward from one corner of the frame of the window, serves to support the inner end of the curved handlebar 35 when the shutter is closed or bowed.

The construction of my invention will be readily understood from the foregoing de-

scription, and its operation may be described as follows: Presuming the parts to be in the positions illustrated in Fig. 1, in which the shutter is closed and locked, to open it it will 5 be necessary to remove the pin 40, which will leave the handle-bar 35 and bar 31 free to be operated. The handle-bar is pulled to the left, which will carry the inner end of bar 31 with it, said bar moving in bracket 32 as a to pivot, throwing the block 21 to the right, releasing rod 29 from engagement with catchblock 28. The handle-bar is now turned on its pivotal connection with bar 31 to bring it substantially in line therewith, when both 15 bars 31 and 35 are pressed longitudinally outward, pushing the shutter open. The opening movement may be continued only far enough to bring the shutter to its bowed position, as shown in Fig. 3, where it may be 20 locked by inserting pin 40 into perforation 37 of the handle-bar, or the movement may be continued until the shutter is fully opened, as shown in Fig. 2, where it may be locked by inserting pin 40 in one of the per-25 forations 39 of the handle-bar. An intermediate position would be maintained by locking the pin in perforation 38. At the first movement in opening the shutter when the block 21 is moved to the right the latch 30, 30 with its outer end resting on arm 23, is carried to the right through slot 25 in latchhook 24. This raises hook 24, which permits the bar 31 to pass under it when the shutter is nearly opened, where it will remain until 35 the closing operation begins. The first step in this operation is to draw inward on the handle-bar, when the bar 31, held close against the shutter by the latch-hook 24, will act as a rigid extension of the shutter beyond its 40 hinge and when pulled will cause the shutter to move outward from the wall to a position substantially in line with bars 31 and 35. The continued pull on these bars will push the latch 30 into slot 25 of latch-hook 24 and 45 raise the latch-hook out of engagement with bar 31, so that the pull may be continued until the shutter is closed, as shown in Fig. 1, and the rod 29 is latched over catch-block 28.

From the foregoing it will be readily seen that I have provided simple, strong, and efficient means for carrying out the objects of my invention, and while I have specifically and minutely illustrated and described the several parts I desire it to be understood that I do not restrict myself to the exact forms 55 and constructions shown, but hold that any slight variation in the construction of the parts, such as might suggest itself to the ordinary mechanic, would clearly be comprehended in the limit and scope of my invention.

Having thus fully described my invention, what I claim as new, and desire to secure by Letters Patent of the United States, is—

1. The catch-block on the sill, the bracket 65 on the shutter near its outer edge having parallel slotted arms, a bifurcated block pivotally connected to the shutter and the rod pivotally connected to the bifurcated block and slidably arranged in the parallel slotted arms, 70 substantially as described.

2. The combination with the window-frame and the shutter hinged thereto, of the bracket inside the shutter near the hinge, the bifurcated block hinged thereto, the arm projecting inward at the opposite end of the bracket, the slotted gravity latch-hook alongside of said arm, the latch-bar pivoted to the bifurcated block, passing through the slot in the hook and resting on the arm, and the operation ing-bar also pivoted to the bifurcated block, substantially as described.

3. The herein-described shutter-fastener consisting of bracket 26 with parallel slotted arms 27, bracket 18 with arm 23, gravity latch-85 hook 24 with slot 25, the bifurcated block 21 pivotally secured to the bracket 18, the bar 31 pivotally connected to block 21, the handle-bar 35 pivoted to bar 31, the steel rod working in slots of arms 27, and the catch-90 block 28, all substantially as described.

ALBERT L. STETLER.

Witnesses:

E. L. NEWHARD, M. U. REINHARD.