

J. Solan,
Shutter Worker.

N^o 30,991.

Patented Dec. 18, 1860.

Fig: 1.

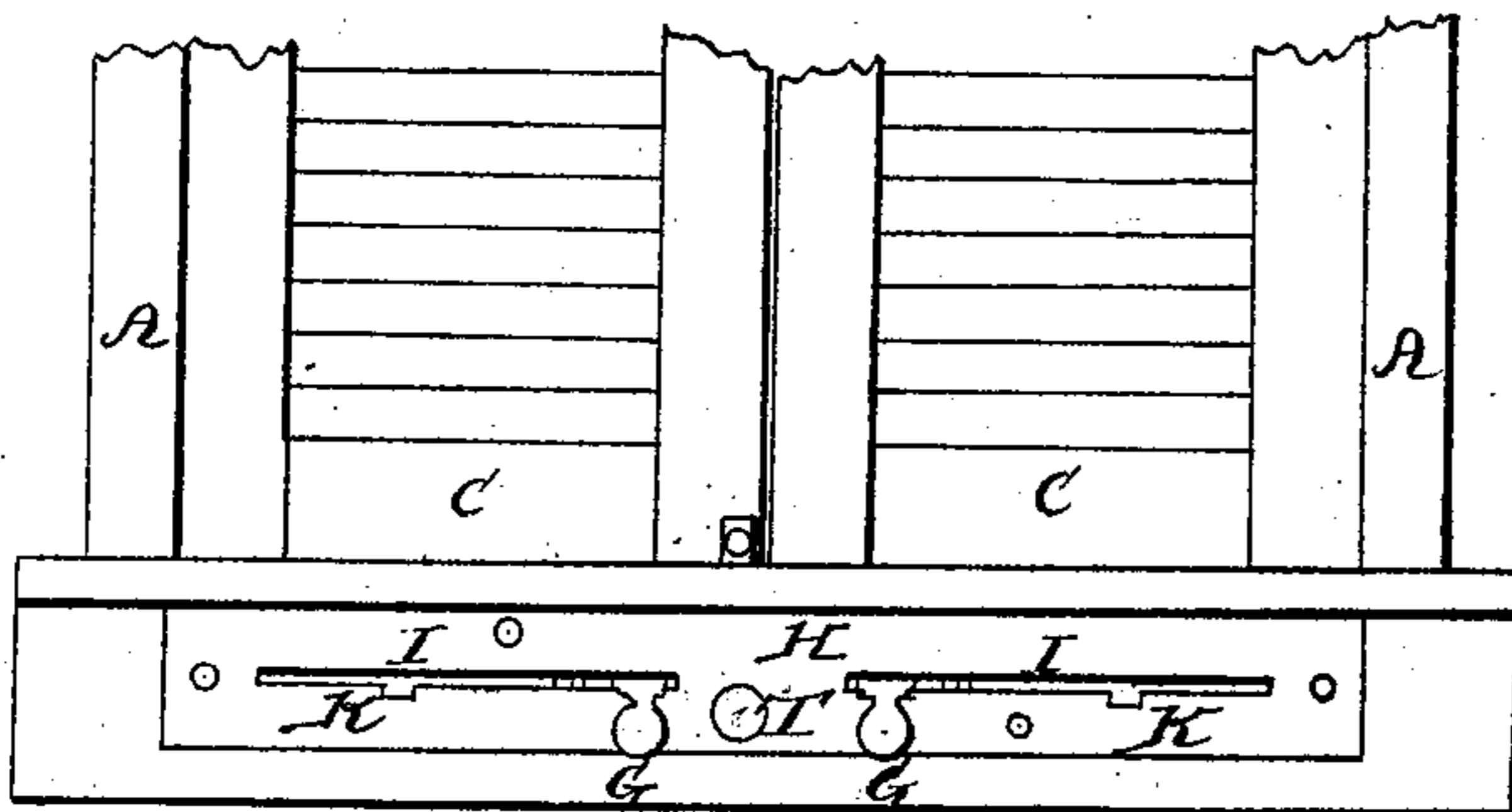


Fig: 2.

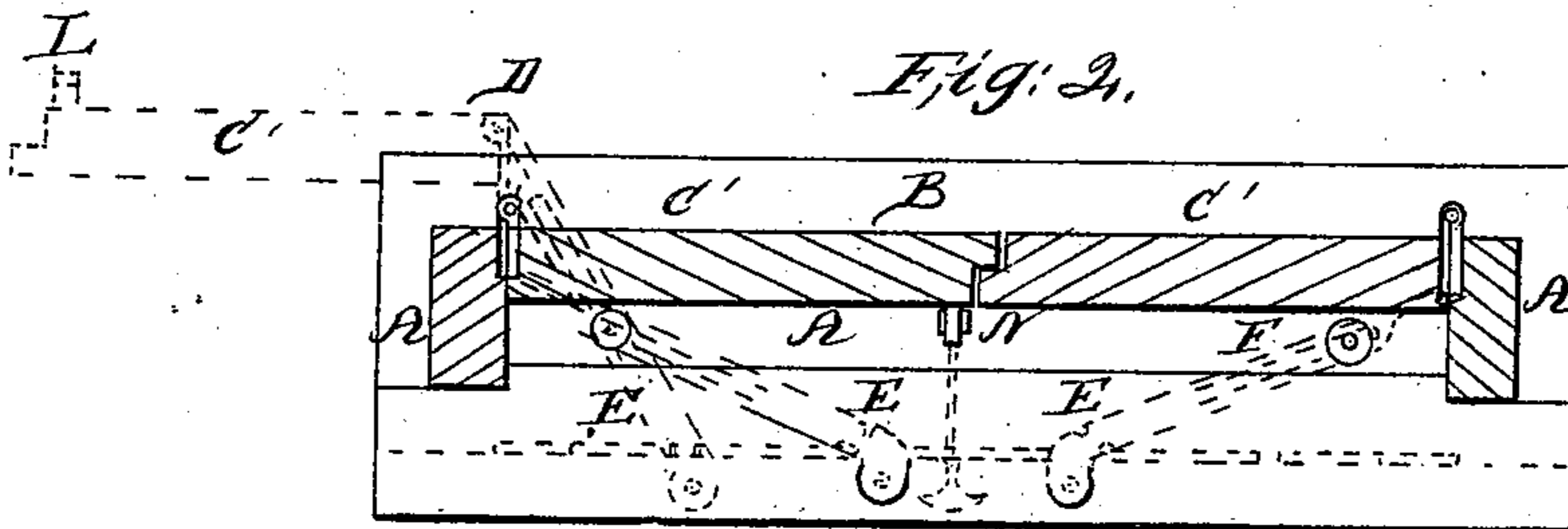


Fig: 3.

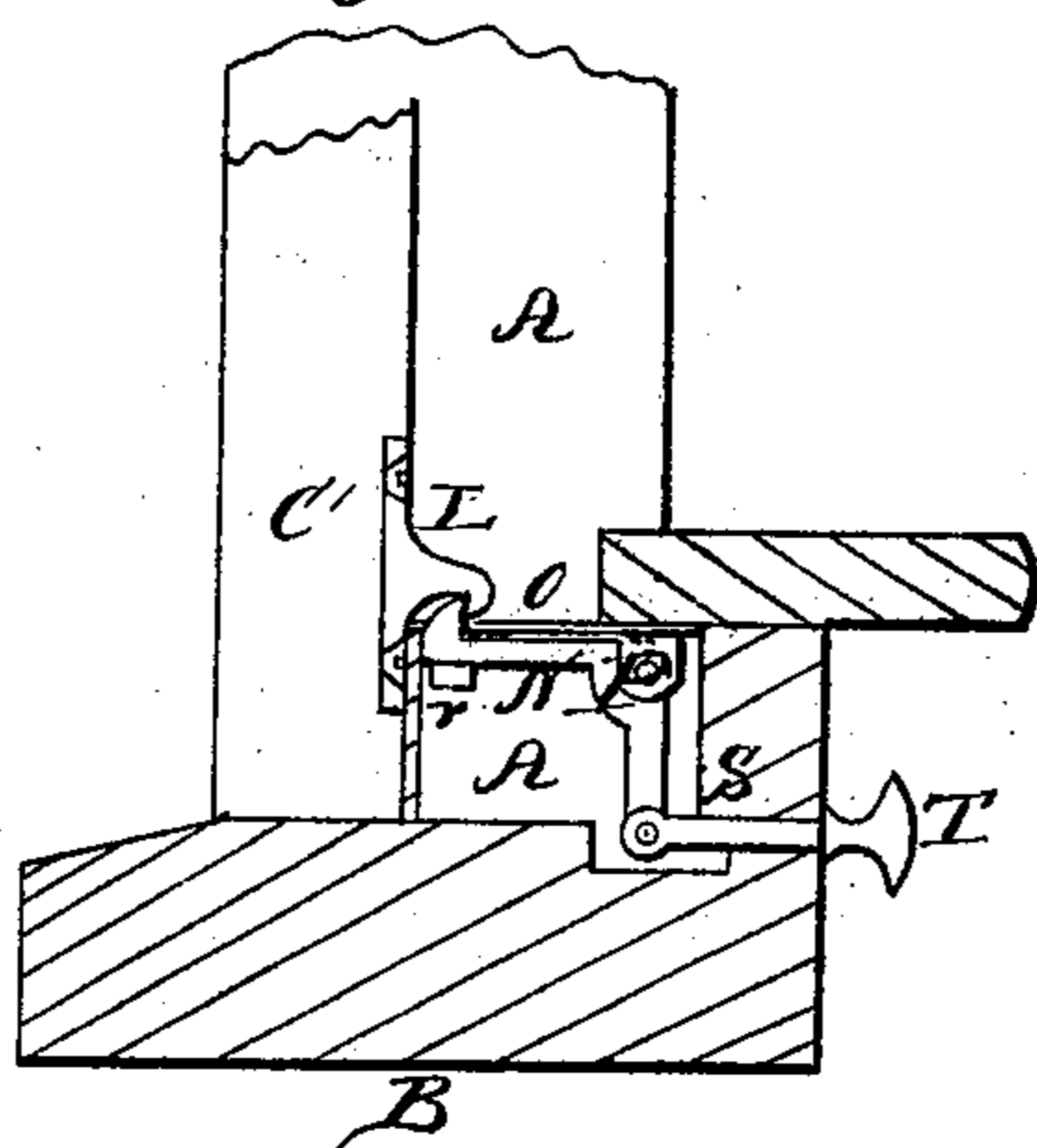
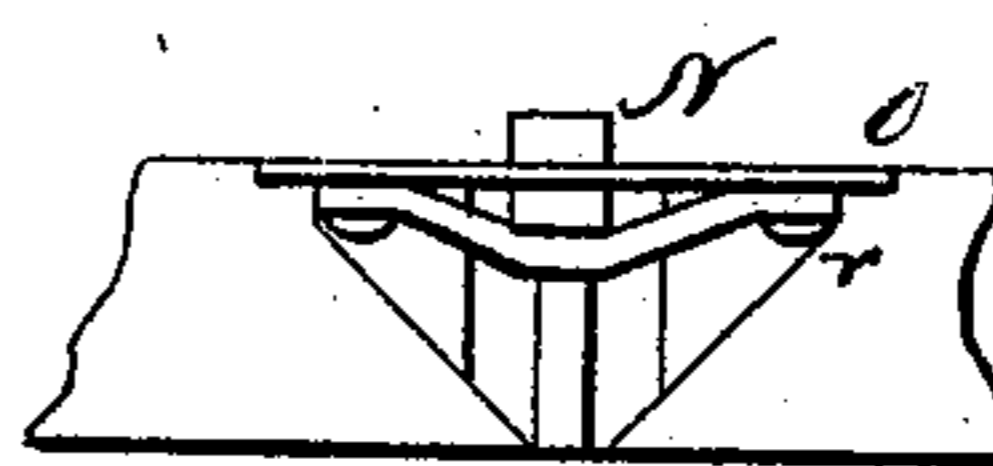


Fig: 4.



Witnesses:
James Cornwall
Wm M Smith

Inventor:

John Solan

UNITED STATES PATENT OFFICE.

JOHN SOLAN, OF FREDERICKSBURG, VIRGINIA.

SHUTTER-OPERATOR.

Specification of Letters Patent No. 30,991, dated December 18, 1860.

To all whom it may concern:

Be it known that I, JOHN SOLAN, of Fredericksburg, in Spottsylvania county and State of Virginia, have invented a new and useful Improvement in Operating and Fastening Outside Window-Shutters; and I do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawing, through letters of reference marked thereon, forming part of this specification, and in which—

Figure 1 represents an inside elevation of the lower part of the window frame and sill, the shutters being closed. Fig. 2 represents a horizontal section on the line $x\ x$ of Fig. 1; with one shutter and its attachments in their relative positions, when open, shown in red lines. Fig. 3 is a transverse section through the sill showing the shutter fastener in elevation. Fig. 4 is a view of said fastener from the outside, the portion of the sill which incloses it being removed so as to expose the catch and spring.

My invention consists first in the arrangement of a lever attached to the shutter passing through and having its fulcrum in the sill so as to be operated from the inside either to open or close the shutter without raising the sash, secondly in the construction and arrangement of the shutter fastener for the like purpose.

To enable others to make and use my invention I will describe its construction and operation by reference to the drawings in which—

(A) represents the window frame constructed in the usual form and resting on a stone or other sill (B). To the lower and outer corner of the heel of the shutter (C) when open, is attached by a pivot joint (D) the slotted lever (E) which has a sliding and vibrating motion on the fulcrum (F) and by which the shutter is opened or closed; this lever passes through a slot in the sill and is fitted with a knob (G) on its inner end. On the inner side of the sash frame is a thin plate of iron (H) in which is a slot (I) to guide the levers (E). The lower edges of the slots (I) have notches (K) in them for the purpose of holding the shutter open or partly so.

To the overlapping shutter (C') is attached a rigid catch or hook (L) which holds it, when closed, by hooking into the spring catch (N) which is constructed in the form of an elbow lever whose fulcrum (P) is attached to the window frame, and the catch end is supported and borne up by an elastic india rubber spring (R) which is a straight slip of rubber attached at each end to the metal plate (O) and passes under the catch; a spiral or other spring might be substituted but the one described is preferable. To the lower end of the pendent arm of the elbow is jointed a rod (S) passing through the window frame with a knob (T) on the inside by which the catch is drawn back to release the shutter before opening.

In opening the shutter the knob (T) is first pulled to release the catch, when the lever (E) on the left hand is borne by the knob (G) toward the left until its point of connection with the shutter at (D) has passed the direct line, from the hinge of the shutter to the fulcrum, after which it is pressed endwise outward, and then borne sidewise to the right, to throw the shutter back against the wall, when the lever (E) drops into the notch (K) and secures it. This motion will be clearly understood by examining the drawing, Fig. 2. This lever arrangement gives entire control of the shutter without opening the sash and sufficient power to operate it against high winds.

Having thus described my invention what I claim as new and desire to secure by Letters Patent is—

The arrangement of the levers (E) having a sliding and vibrating motion on their fulcrum in combination with the slotted and notched plate (H) for opening window shutters and securing them when open substantially as specified.

In testimony whereof I have hereunto subscribed my name before two subscribing witnesses this 8th day of October A. D. 1860.

JOHN SOLAN.

Witnesses:

JAMES CORNWALL,
WM. M. SMITH.