

N. W. Speers,
Shutter Worker.
Nº 7,998. Patented Mar. 25, 1851.

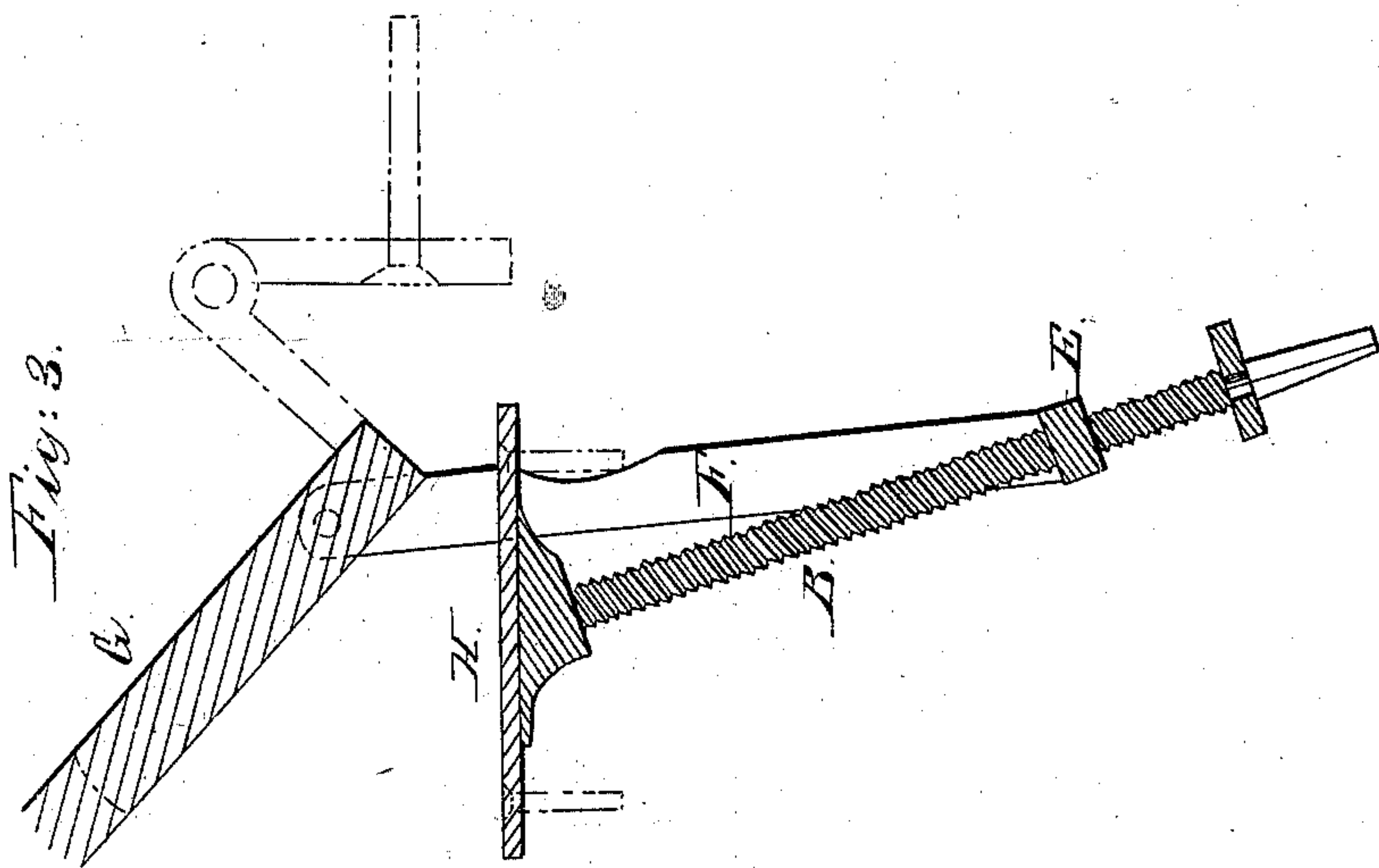
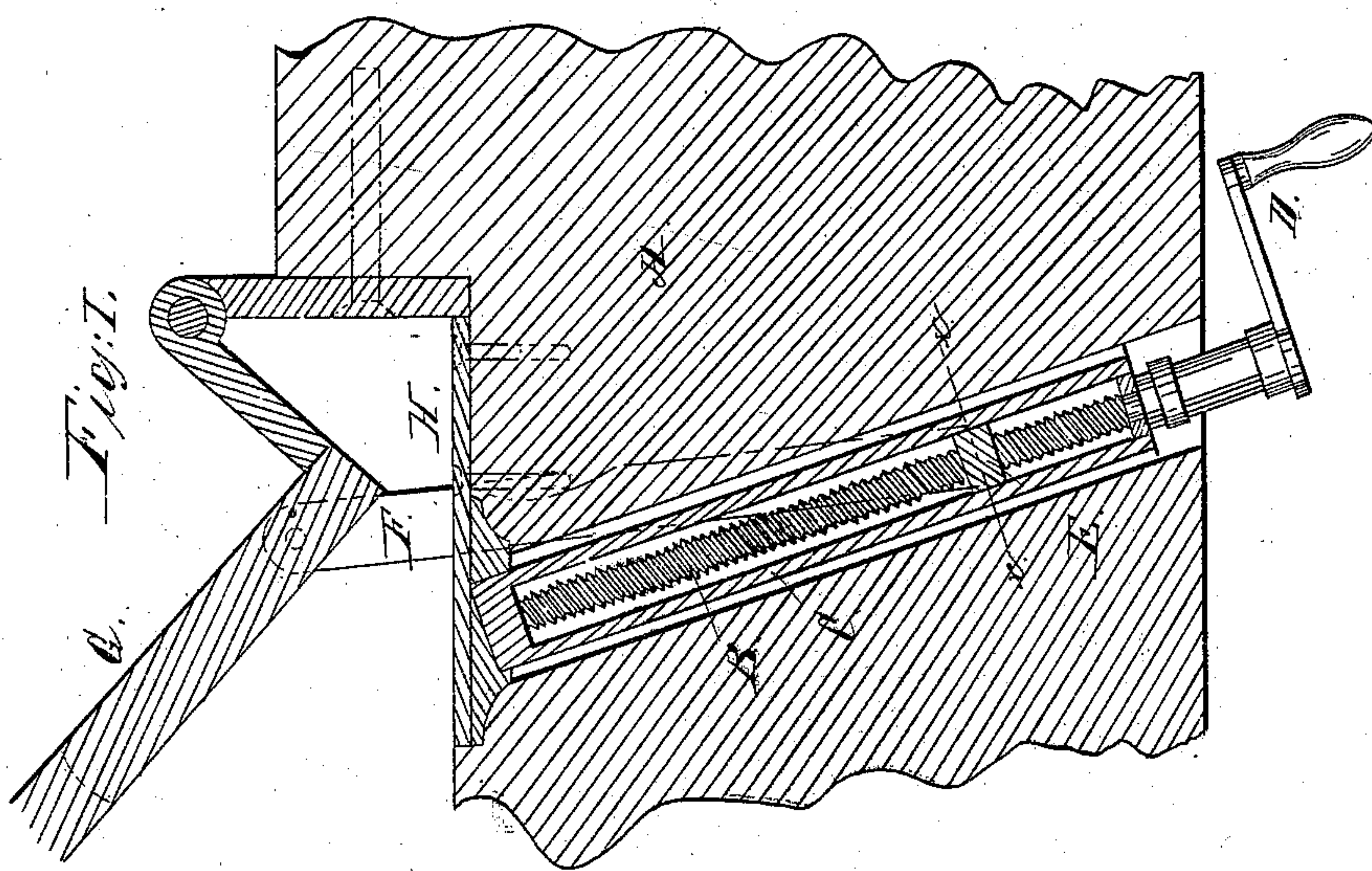
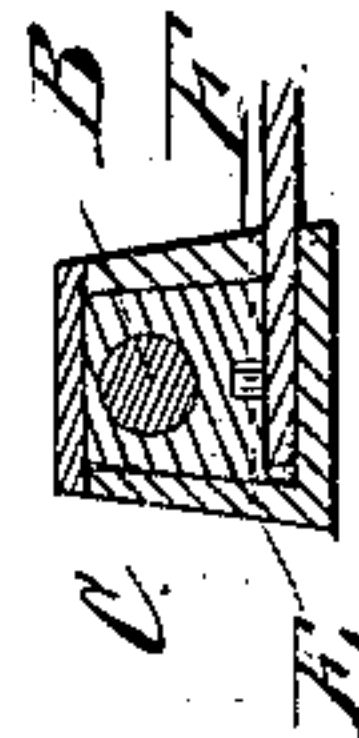


Fig. 2.



UNITED STATES PATENT OFFICE.

N. W. SPEERS, OF CINCINNATI, OHIO.

APPARATUS FOR MOVING AND SECURING SHUTTERS, &c.

Specification of Letters Patent No. 7,998, dated March 25, 1851.

To all whom it may concern:

Be it known that I, N. W. SPEERS, of Cincinnati, in the county of Hamilton and State of Ohio, have invented a new and useful apparatus for opening and closing window-shutters from the inside of the house to which they are attached and fastening them at any desired point in their semicircuit without raising the sash, which is described as follows; reference being had to the annexed drawings of the same, making part of this specification.

Figure 1, is a top or bird's-eye view of the apparatus applied to a window; the sill and shutter of the window being represented in horizontal section. Fig. 2, is a section of the same at the line *xx* of Fig. 1. Fig. 3, is a top view of the apparatus, applied to a window shutter hinged or hung in the ordinary mode.

Similar letters refer to like parts.

The nature of my improved apparatus consists in opening and closing the shutters by means of screws embedded in the lower part of the frame of the window, operating, when turned by a key on the inside, upon nuts connected to the lower portion of the window shutters by arms, in such a manner as to enable them to be moved with great ease, and held firmly at any desired point in their semicircuit, and secured, when closed, against all danger of being opened from the outside.

To enable others skilled in the art to make and use my invention, I will proceed to describe its construction and mode of application.

A is the lower portion of the frame of the window.

B is a horizontal metallic screw shaft inserted in an opening, formed by an auger, diagonally through the frame, and turning in suitable metallic boxes at its ends, secured in the window frame. These boxes may be either connected to the extremities of a cylindrical or rectangular metallic casing C, having a movable top and inclosing the screw shaft B, and fastened at its outer end to the window frame as represented in Fig. 1; or the casing may be dispensed with and the boxes may be fastened to the frame in any convenient manner (as represented in Fig. 3). The screw shaft B is made square at its inner end to receive a socket crank or key D by which it is turned.

E is a metallic nut surrounding the screw shaft which passes through the same, connected by a pin at its lower part to a horizontal bar or arm F, extending through a space in the window frame to the outside of the same and attached at its outer end by a pin to a metallic plate or arm G, secured by screws to the lower edge of the shutter, and extending at right angles from one wing of the lower hinge of the shutter, which is in this case (when the hinge and apparatus are cast together to be applied to a new shutter, as represented in Fig. 1) secured at the extreme lower end of the shutter—the other wing of the hinge being cast with, or otherwise attached to the plate H to which the casing is connected, which secures it firmly to the window frame.

In case it is desired to apply this principle of apparatus to a shutter hung on the ordinary hinges, it is formed after the manner of the section marked Fig. 3, in the annexed drawings; the plates or arms G, H, being cast distinct from the wings of the hinge.

In applying the apparatus to a window, it is only necessary to mark on the lower portion of the frame the distance from the axis on which the shutter moves to the point on the outer face of the frame where the line of the screw shaft is to intersect, and ascertain on the inner surface of the frame where the line is to intersect there, and after arriving at these points to bore an auger hole through the frame suitable to receive the screw shaft and its attachments; said hole being afterward covered on the inside by a brass, silver, or other plate, perforated to allow the entrance of the key D, and on the outside by the plate. The crank or key for turning the screw shaft may be made as represented, or of any ornamental form desired.

When it is desired to either open or close the shutter the crank or key D is either turned to the left or right as the case may be, causing the metallic nut E to be moved out or in, forcing or drawing the shutter with it in its movements with a speed and power commensurate with the angle of the threads of the screw with the line of the shaft on which they are formed.

After the shutter is once moved to the position desired, either entirely open, or closed, or at any intermediate point, it will be held there firmly by the bar or plate F attached to the nut E, through whose agency it was

moved—the binding of the nut on the screw shaft B, preventing it from moving either way, without the screw shaft being turned.

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

The manner of opening and closing window shutters from the inside and securing them firmly at any point in their semicircuit by means of the horizontal screw shaft B

inserted in an opening in the lower portion 10 of the window frame, metallic nut E surrounding the same, and the bar or plate F attached to the shutter, substantially as described.

N. W. SPEERS.

Witnesses:

A. I. PATTERSON,
JASPER PENZELL.