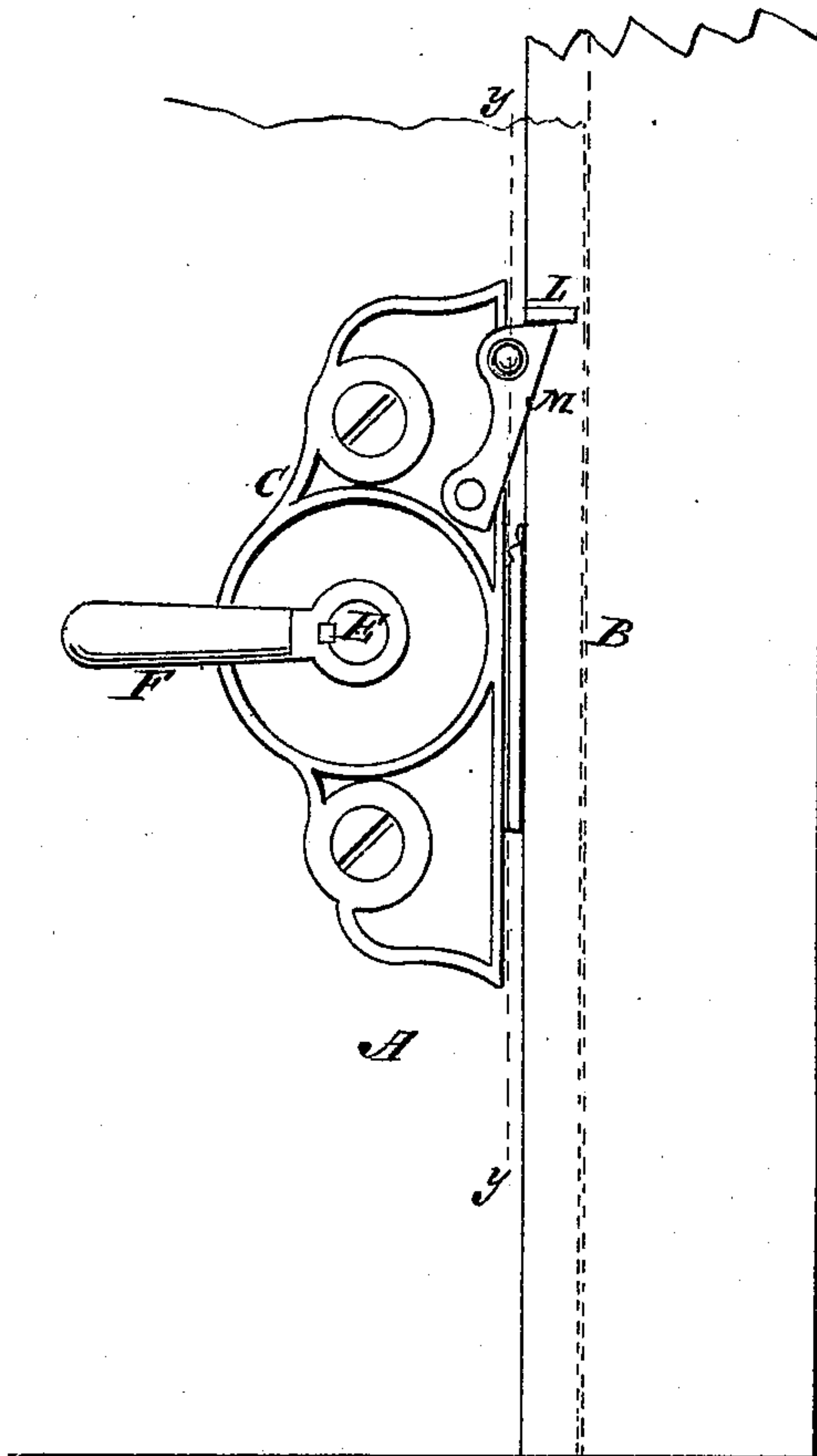


**G. W. RICHARDSON.**  
**Sash-Holders.**

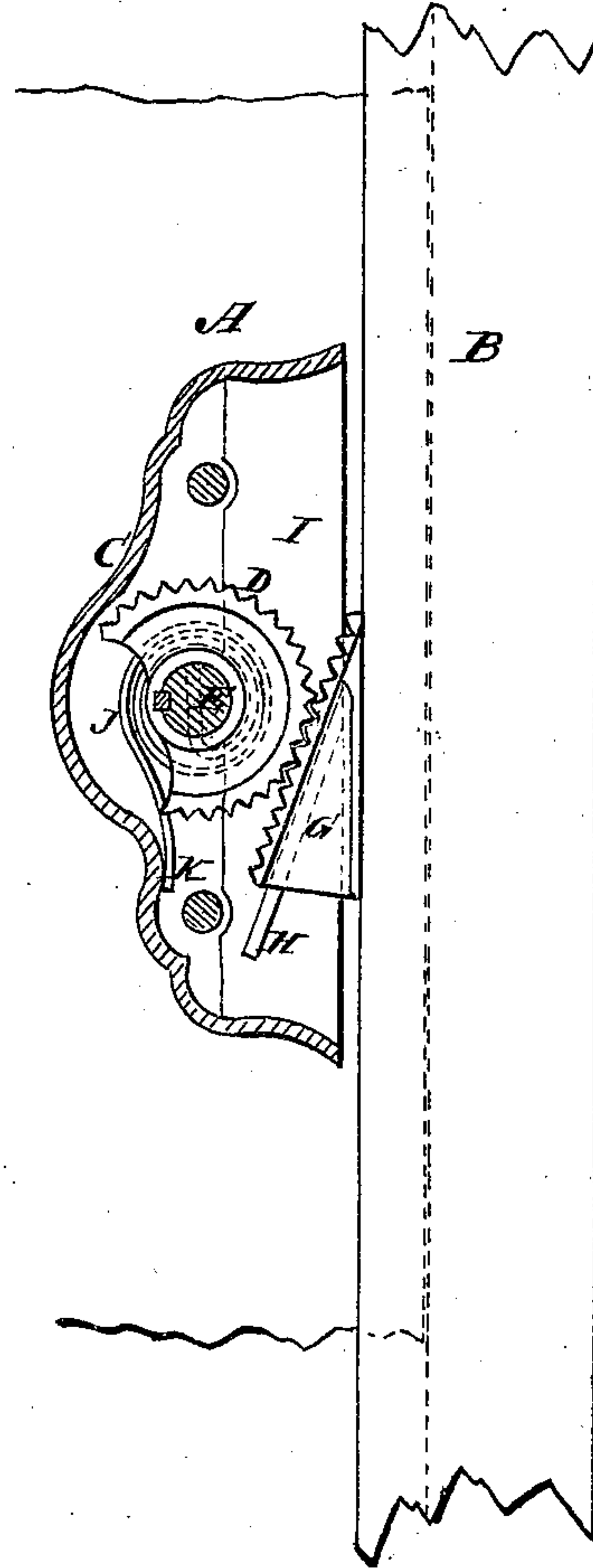
No. 141,078.

Patented July 22, 1873.

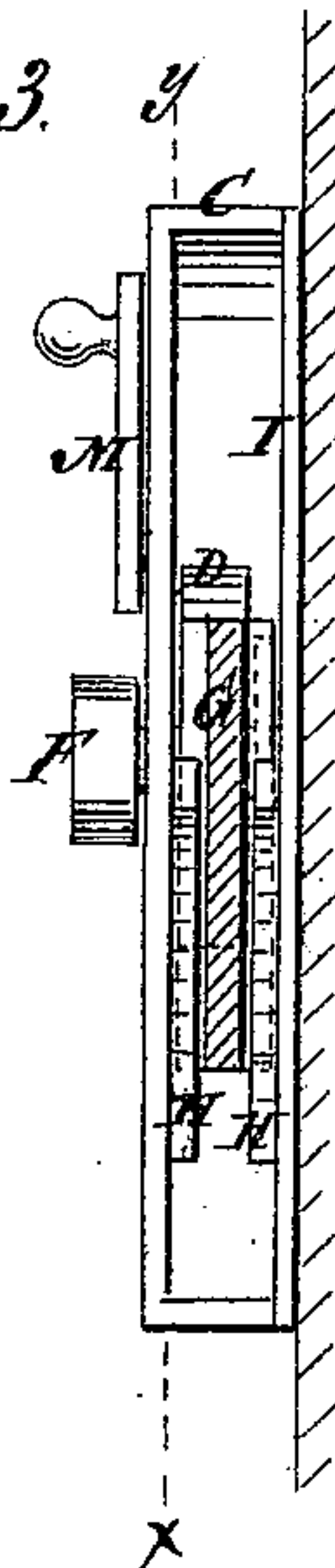
*Fig. 1.*



*Fig. 2.*



*Fig. 3.*



**Witnesses:**

*E. Wolff.*  
*H. J. G. J. G.*

**Inventor:**

*G. W. Richardson*  
**Per** *M. M. J. G.*  
**Attorneys.**

# UNITED STATES PATENT OFFICE.

GEORGE W. RICHARDSON, OF COLUMBUS, KENTUCKY.

## IMPROVEMENT IN SASH-HOLDERS.

Specification forming part of Letters Patent No. **141,078**, dated July 22, 1873; application filed June 21, 1873.

*To all whom it may concern:*

Be it known that I, GEORGE W. RICHARDSON, of Columbus, in the county of Hickman and State of Kentucky, have invented a new and useful Improvement in Window-Sash Locks, of which the following is a specification:

The object of this invention is to furnish means for holding the sashes of windows in any desired position in the frame or casing; and it consists in the arrangement of a spiral or coil spring, acting upon the sector and wedge-shaped rack, as hereinafter more fully described.

In the drawing, Figure 1 is a side view of the lock applied. Fig. 2 is a horizontal section of Fig. 3 taken on the line *x x*. Fig. 3 is a section of Fig. 2 taken on the line *y y*.

Similar letters of reference indicate corresponding parts.

A is the sash, and B the casing, of the window. The lock is attached to the sash. C is the shell or casing of the lock. D is a cogged sector wheel or pinion, which is fast on the spindle E. F is the operating-lever. This lever is fastened to the end of the spindle outside the shell, as represented in Fig. 1. G is a wedge-shaped rack, which is made to engage with the sector D. It is grooved upon its sides, so as to move freely on the slides H, which are attached to the shell A. I is the inner plate of the shell A, to which one of the slides is attached. The wedge moves up and down parallel with the casing, with its face in contact therewith, as seen in Fig. 2.

It will be seen that the wedge is moved upward by turning the sector, and will crowd

against the casing, and cause friction sufficient to support the sash while the sector is held stationary.

The action of the wedge on the sector is made automatic by means of the coil-spring J. One end of this spring is fastened to the spindle E, and, after being coiled around the shaft, as is indicated in dotted lines in Fig. 2, the other end is extended, and bears against the shell, as seen at K. The tension given the spring, when it is fixed in this position, has a constant tendency to turn the sector and force the wedge upward, and, consequently, to hold the sash.

By a slight upward pressure on the operating-lever F the sector is turned, and the wedge is moved downward, and the sash released. The friction, therefore, by which the sash is held is automatically produced and constant, except when relieved by means of the lever F, as described.

L is a stop on the casing, and M a button on the sash, for fastening the sash down.

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

1. The arrangement of the spring J, in combination with the sector or pinion D and the wedge G, as and for the purposes described.

2. An automatic sash-lock, consisting of the shell A, spindle E, lever F, sector or pinion D, wedge-rack G, and coil-spring J, arranged substantially as shown and described.

GEORGE W. RICHARDSON.

Witnesses:

W. I. KERR,  
W. K. COFLIN.