

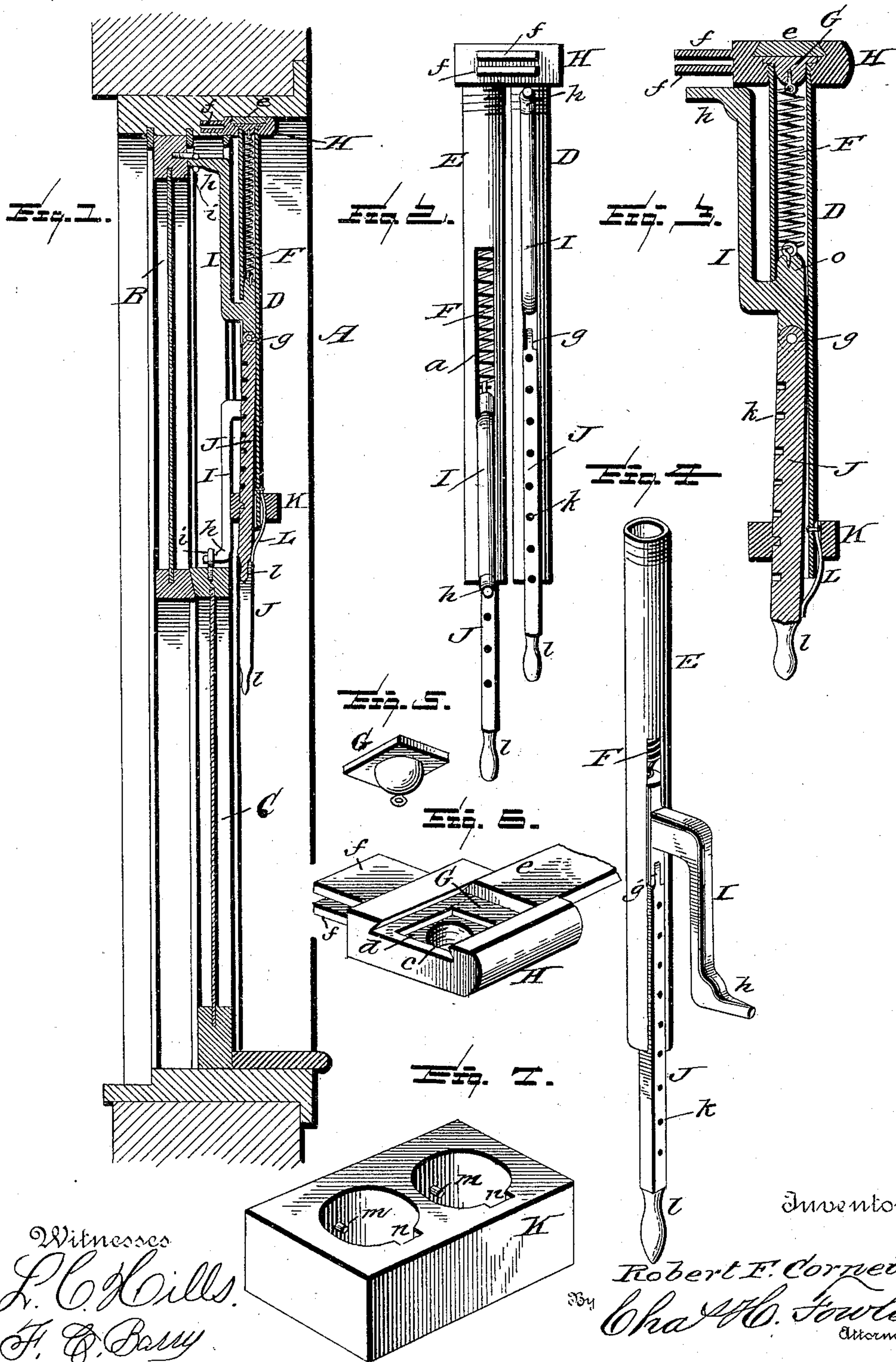
No. 639,151.

Patented Dec. 12, 1899.

R. F. CORNEIL.
WINDOW SASH PULL.

(Application filed Aug. 9, 1899.)

(No Model.)



Witnesses
L. C. Mills.
H. O. Barry.

Inventor
Robert F. Corneil.
Cha. M. Fowler.
Attorney

UNITED STATES PATENT OFFICE.

ROBERT F. CORNEIL, OF PHILLIPSBURG, MONTANA, ASSIGNOR OF ONE-HALF
TO GEORGE CORNEIL, OF SAME PLACE.

WINDOW-SASH PULL.

SPECIFICATION forming part of Letters Patent No. 639,151, dated December 12, 1899.

Application filed August 9, 1899. Serial No. 726,639. (No model.)

To all whom it may concern:

Be it known that I, ROBERT F. CORNEIL, a citizen of the United States, residing at Phillipsburg, in the county of Granite and State of Montana, have invented certain new and useful Improvements in Window-Sash Pulls; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the annexed drawings, making a part of this specification, and to the letters of reference marked thereon.

The present invention has for its object to provide a simple and practically-operating device for raising and lowering the sashes of a window-frame; and it consists in the means substantially as shown in the drawings and hereinafter described and claimed.

Figure 1 of the drawings is a sectional elevation of a window frame and sashes, showing my improved lifting device applied thereto; Fig. 2, an inner side view of the two devices constituting my invention, showing the manner of connecting them together; Fig. 3, a sectional elevation thereof; Fig. 4, a perspective view of one of said devices; Fig. 5, a detail view of one of the caps to which the upper end of one of the spiral springs is attached; Fig. 6, a detail perspective view of the bracket for connecting thereto the tubular hangers, and Fig. 7 a detail perspective view of the guide-block.

In the accompanying drawings, A represents the usual window-frame, and B C the upper and lower sashes, respectively, to which my improved devices are attached. The devices which are designed to open the sashes and hold them in their opened position are in duplicate and consist in part of the two tubular hangers D E. These hangers are slotted, as shown at a, and each contains a spiral spring F, the upper ends of which springs are suitably connected to caps G, which are removably supported upon the ends of the tubular hangers D E. The upper ends of the hangers are screw-threaded to engage a screw-threaded opening c in a horizontal bracket H, said bracket upon its upper side having a mortised seat d for the cap G. These caps G are held down upon the mortised seat d by a slide e. This bracket H is removably held to the upper end of the window-frame by the

two spring-plates f, extending out horizontally and parallel with each other.

A suitable mortised opening is made in the upper portion of the window-frame to receive the spring-plates f, the opening being of such size as to compress the spring-plates, whereby the spring-plates are held securely in the mortised opening by frictional contact with the sides thereof, thereby enabling the bracket H to be readily removed and replaced when found necessary without the use of screws, nails, or other like fastenings.

The operating-rods by which the sashes are opened or closed consist of two sections I J, which are jointed together at g, whereby the lower section J will have a slight swing upon its jointed connection. The upper section I of the operating-rod has a hooked end h to engage an eye or staple i upon the top of one of the window-sashes, while the lower section J has a plurality of notches k and is provided with a suitable hand-grasp l, by which it may be operated. A guide-block K is connected to the lower ends of the tubular hangers D E and have projecting pins m for engaging the notches k on the operating-rod section J, the notch being retained in engagement with the pin by means of a flat curved spring L. This spring at one end is suitably fastened to the outside of the tubular hanger near its lower end and is located in the groove n of the block to admit of the spring having free play. The unattached or free end of the spring L bears against the operating-rod section J and keeps it in engagement with the pin m, thereby holding the sash in its adjusted or open position, or in a closed position, as the case may be, without the necessity of any additional fastenings for the sashes.

It will be noticed that the upper rod-section I, located in the tubular hanger D, extends upward, while the rod-section I, located in the tubular hanger E, extends in a downward direction or in an opposite direction to the rod-section in the tubular hanger D to adapt both these rod-sections I to engage their respective sashes at the top, so that by pulling down upon either of the operating-rods the sash to which the rod is connected will be opened.

The spiral spring F has its opposite ends

connected to the cap G and to a shoulder o upon the rod-section I, thereby rendering the operating or pull rod spring-actuated to bring the rod back to its normal position when the section J thereof is released from engagement with the pin m.

The jointed operating or pull rods may be of any suitable construction, and any suitable form of springs may be employed in connection with the two jointed sections of the rod, as found best adapted to the purpose.

The sash pull or lifter, as hereinbefore described, is effective in its operation and possesses both strength and durability and can be applied to any window sash and frame with comparatively little trouble.

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

1. A window-sash lift or pull, consisting of a tubular and vertically-slotted hanger and a spring-actuated operating-rod formed in two jointed sections, the lower one of said sections being located in the slotted portion of the hanger only, whereby said section will admit of a lateral movement on its pivotal connection with the upper section, and means for locking the lower section in position to hold the window-sash in its adjusted position, substantially as and for the purpose set forth.

2. A horizontal bracket projecting from the window-frame, tubular hangers connected thereto, spring-actuated operating-rods formed in jointed sections, a guide-block connected to the lower ends of the tubular hangers and having engaging pins, the lower sections of the jointed rods having a plurality of notches or holes to engage the pins, and a spring to keep the sections in engagement with the pins, substantially as and for the purpose specified.

3. A window-sash lifter or pull, consisting of a horizontal bracket having flat spring friction-plates, removable caps seated in the bracket and a slide connecting with the bracket to hold the caps in place, tubular and slotted hangers depending from the bracket, operating-rods which are both jointed and spring-actuated, and means for locking the lower sections of the operating-rods to retain the sash in a closed or adjusted position, substantially as and for the purpose described.

In testimony that I claim the above I have hereunto subscribed my name in the presence of two witnesses.

ROBERT F. CORNEIL.

Witnesses:

S. A. BROWN,
F. A. TAYLOR.