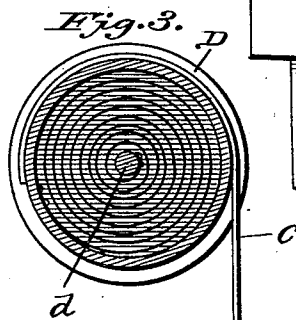
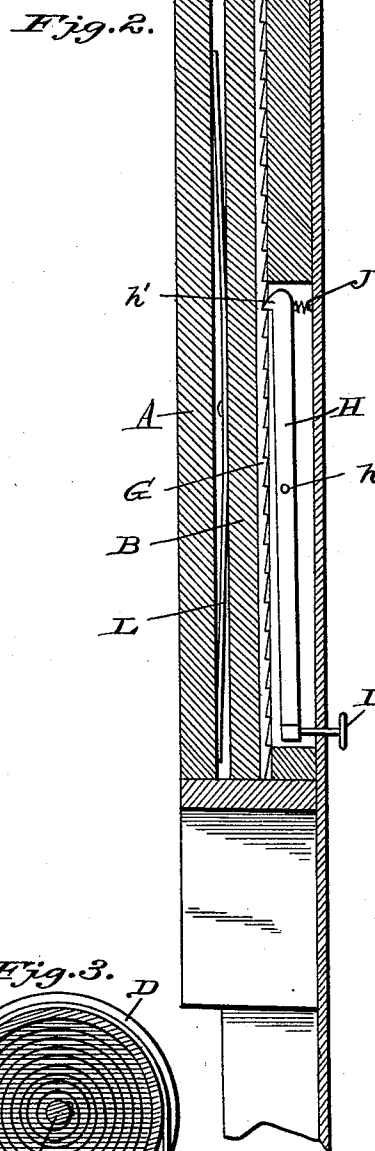
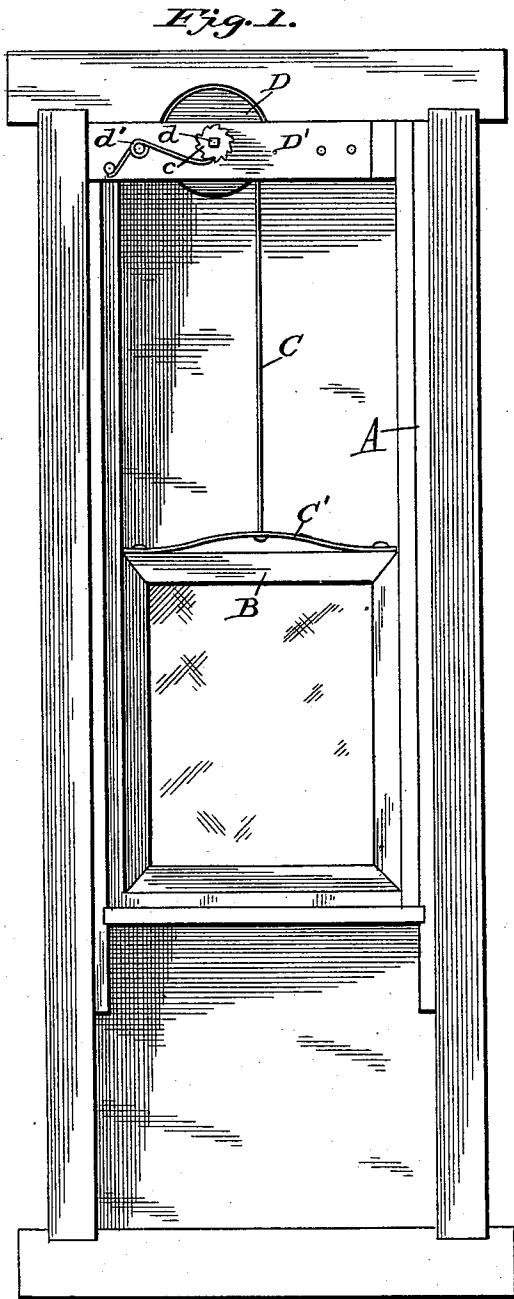


(No Model.)

R. L. BROWN.
SASH BALANCE.

No. 568,739.

Patented Oct. 6, 1896.



Witnesses
Edwin G. Kee,
K. A. Han

Inventor
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By John Hedderburn
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UNITED STATES PATENT OFFICE.

RICHARD L. BROWN, OF SALISBURY, NORTH CAROLINA.

SASH-BALANCE.

SPECIFICATION forming part of Letters Patent No. 568,739, dated October 6, 1896.

Application filed January 31, 1896. Serial No. 577,562. (No model.)

To all whom it may concern:

Be it known that I, RICHARD L. BROWN, a citizen of the United States, residing at Salisbury, in the county of Rowan and State of North Carolina, have invented certain new and useful Improvements in Windows; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

This invention relates to certain new and useful improvements in windows.

The novelty resides in the peculiar combination, construction, arrangement, and adaptation of parts, all as more fully hereinafter described, shown in the drawings, and then particularly pointed out in the appended claim.

The invention is clearly illustrated in the accompanying drawings, which, with the letters of reference marked thereon, form a part of this specification, and in which—

Figure 1 is a front elevation of a window provided with my improvement. Fig. 2 is a vertical section. Fig. 3 is an enlarged section through the drums.

Like letters of reference indicate like parts in the several views.

Referring now to the details of the drawings by letter, A designates the window-frame, and B the sash, mounted to slide therein in the usual manner.

C is a chain or cord having one end secured to or connected with the sash in any suitable manner, in this instance being shown as connected to the center of a spring-bar C', attached at its ends to the upper edge of the sash and at the other end is wound around and attached to a drum or curved roller D, carried by a shaft d, mounted in the bracket D', secured in the recess in the frame at the upper end of the sash. The shaft carries a ratchet c, which engages a pawl d', mounted on the bracket and adapted to hold the same against retrograde movement.

The end of the shaft is extended and adapted to receive a key or other implement by which the spring may be wound up when desired, the spring being connected with the shaft and arranged within the drum or roller as indicated. The sash at one edge which works in the groove in the frame is provided

with a bar G, which is toothed or racked upon one face and screwed to the sash extending from bottom to top, and connected with the groove in which the sash runs is an arm H, pivotally mounted, as at h, with its upper end formed into a hook h' to engage the rack or teeth of the bar on the sash, and its lower end has connected therewith a push pin or button I, working loosely through an opening in the frame, and the spring J is arranged to act upon this arm to keep it normally in contact with the rack-bar.

As the sash is pulled downward against the tension of the spring in the roller or drum the rack-bar moves over the pawl or hook on the end of said arm and holds the window in any adjusted position. When it is desired to raise the window, it is necessary only to push upon the push pin or button when its lower end is pushed inward and its upper hooked end outward away from its engagement with the rack-bar, and the spring connected with the cord or chain quickly draws the same upward into its open position.

L are side arm-springs fastened to the outside of the sash and work between the sash and the strapping. This serves to make the window run easy and keep it pressed against the inside guide or strip and make the windows dust-proof, which is especially desirable in car-windows.

It will be understood that a similar arrangement reversely arranged may be used in connection with the upper sash, and that various other modifications in details may be resorted to without departing from the spirit of the invention or sacrificing any of its advantages.

Having thus described the invention, what is claimed as new is—

The combination with a sliding window, of a spring-bar secured to the upper end of the sash, a chain or cord connected with said bar and a spring-drum around which said chain or cord is wound and to which one end is attached, substantially as described.

In testimony whereof I have signed this specification in the presence of two subscribing witnesses.

RICHARD L. BROWN.

Witnesses:

LEROY SMITH,
DAVID S. BROWN.