Myers & Smith.

Weather Strip.

No. 7,460. Patented Jun. 25, 1850.

Fig. 4

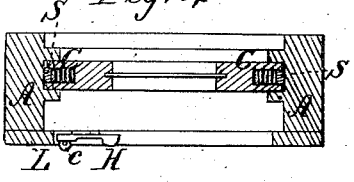


Fig. 7

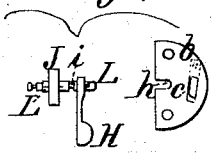


Fig. 9

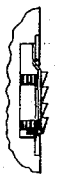


Fig. 8

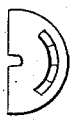


Fig. 5

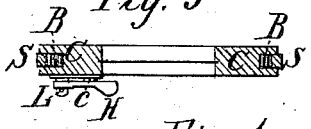


Fig. 1

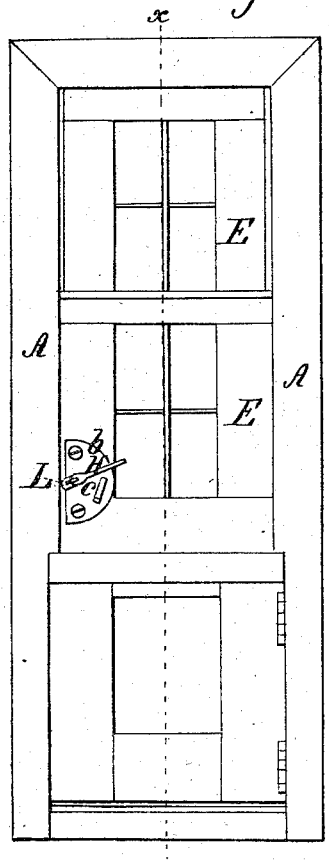


Fig. 2

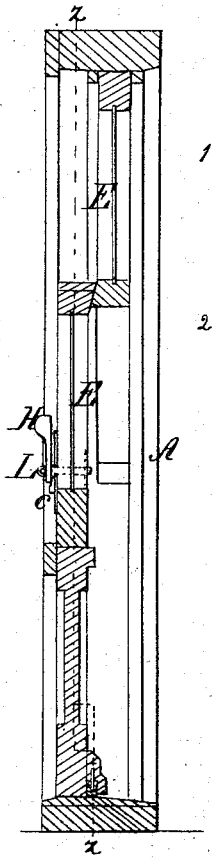
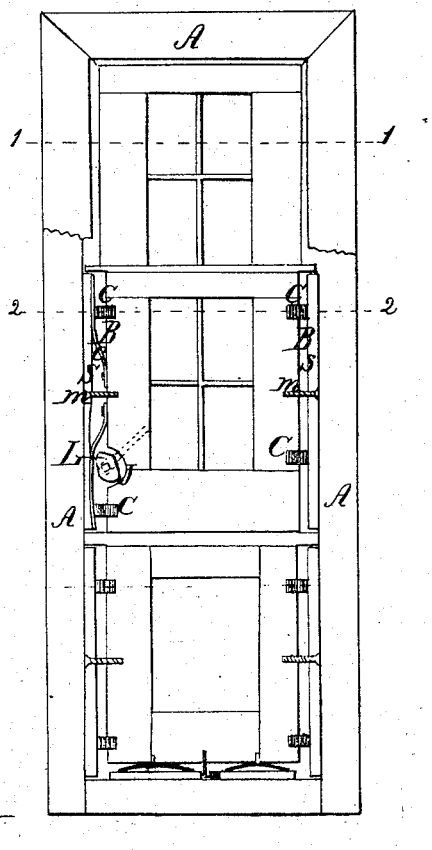


Fig. 3



THE GRAPHIC CO. PHOTO-LITH. 39 & 41 PARK PLACE, N.Y.

UNITED STATES PATENT OFFICE.

N. MYERS, OF CHARLESTON, AND F. C. SMITH, OF HARPERS FERRY, VIRGINIA.

ARRANGEMENT OF SASH-STOPPER.

Specification of Letters Patent No. 7,460, dated June 25, 1850.

To all whom it may concern:

Be it known that we, NATHANIEL MYERS and FREDERICK C. SMITH, of Harpers Ferry, in Jefferson county and State of Virginia, have jointly invented certain new and useful Improvements in a Weather-Strip and Sash-Suspender for Windows; and we do hereby declare this description to be full and clear, reference being had to the annexed drawings of the same, making part of this specification.

The nature of our improvements consists in placing an eccentric within the bar or stile of the window sash in such manner that it shall be made to act upon and against a weather strip secured in a groove or channel formed in the bar of the sash, instead of against the frame or window casing by which said strip or bar is made to serve the purpose of suspending the sash and forming tight joints between the sash, and frame, or casing and by which all defacement of the frame or casing is avoided, and the action of the eccentric rendered more effective in connection with the strip, and also prevents the sash from being shaken by the wind, which produces a disagreeable rattling besides admitting cold air.

Figure 1, is designed to represent an elevation of the interior of the sash and frame of a window, showing the handle of the eccentric axle. Fig. 2 is a transverse section of ditto on the vertical plane x, x of Fig. 1. Fig. 3, is a vertical section on the line z, z, Fig. 2. Fig. 4 is a horizontal section on the line 1, 1, Fig. 3. Fig. 5 is a horizontal section on the line 2, 2, Fig. 3. Fig. 7 is a view of the shield or confining plate and eccentric with its axle and handle. Figs. 8 and 9 plan and section of the shield or confining plate, showing a movable segmental notched plate for holding the eccentric handle in any desired position, having helical springs behind it to keep it extended.

The same letters on all the figures refer to the same parts.

The frame or casing of the window is lettered A, and the upper and lower flights of sash are indicated by the letters E, E.

s, s are the strips or bars, secured in the grooves or channels B of the side bars of the sash by screw bolts (m m) over whose shanks they are permitted to move by the action of the eccentric and springs.

c c are the helical springs placed in the grooves or channels B near the ends of the strips or bars, for the purpose of pressing them outward against the casing to preserve tight joints and thus the bar S is made to act as a weather strip when the sash is closed, and as a friction bar to hold up the sash when it is raised.

J is the eccentric, secured in a recess formed in the channel of one of the sash bars by its axle L passing horizontally through the thickness of the sash, and held therein by a groove or neck (i) Fig. 7—formed on it, near its inner end, which fits into a small slit h formed in the straight edge of the shield or confining plate, and keeps the journal securely in its proper place.

The strip is provided with a small slip of iron placed between it and the eccentric, to receive the action of the eccentric, in suspending the sash, and thus save the strip from wear.

b is the semi-circular shield or confining plate screwed to the sash bar, over the recess in which the eccentric moves, for confining the same, and serving as a bearing plate for the journal of the axle L of the eccentric J.

H is the handle to actuate the eccentric attached to the inner end of the journal L which is made square on its end, to fit a corresponding opening in the end of the handle H and secured by a pin.

The shield or confining plate is provided with a spring catch (c) over and below which the handle H of the eccentric is forced, to lock the eccentric in connection with the strip, and window frame, and thus suspend the sash at any desired elevation.

In order to adjust, and hold the eccentric firmly against the strip, to hold the sash instead of the spring catch, a toothed segmental plate may be let into a segmental groove made in the shield or confining plate, having helical springs arranged behind it, by which it is pressed outwardly to receive the handle and lock the eccentric.

The upper sash may in like manner be provided with springs, eccentric, strips, &c by which to suspend the sash, and form tight joints as aforesaid.

Having described our improvements on the suspender-fastener, and weather strip for windows, and the manner of using the same—we wish it to be understood that we do not claim the eccentric separately considered—nor its employment in connection with the window sash as a fastener, and to

suspend the same, nor the strips when used as weather strips to make tight joints. Nor do we claim the strips separately considered.

But what we do claim as our invention and desire to secure by Letters Patent is—

Placing the eccentric J within the bar or stile of the window sash E, in such manner as to act upon a weather strip S instead of against the frame or casing of the window—the former being thereby firmly pressed against the latter—and all defacement of the window frame by the eccentric avoided as described.

In testimony whereof we have hereunto signed our names before two subscribing witnesses.

NATHANIEL MYERS.
FREDERICK C. SMITH.

Witnesses:
TALBOT S. DUKE,
A. M. CISALER.