

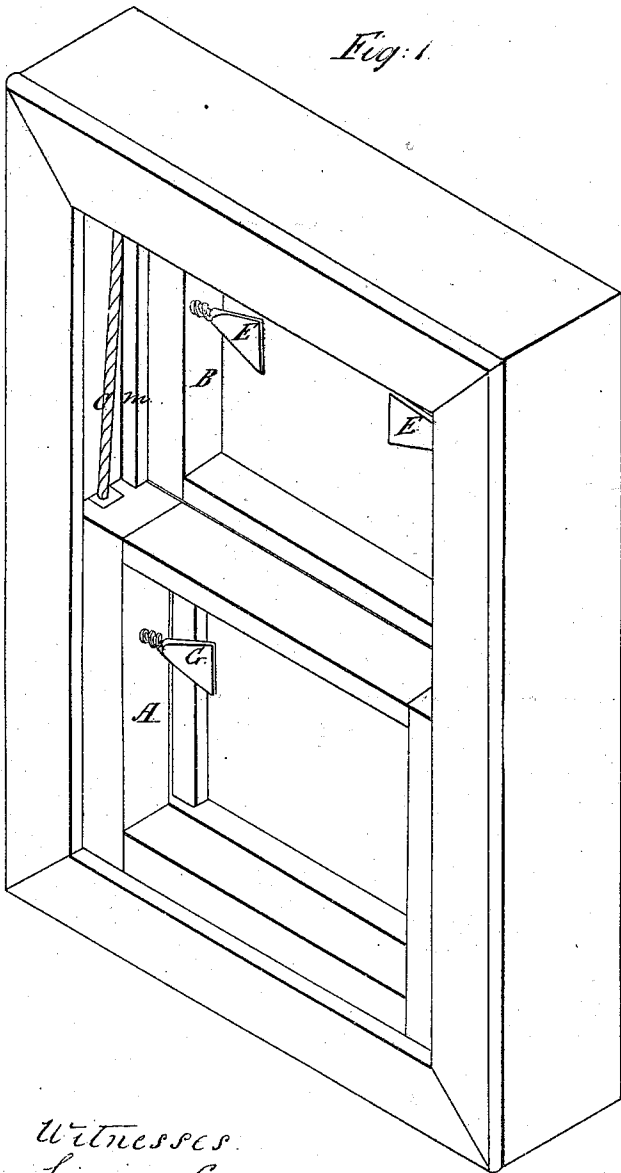
L. Goodwin,

Sash Balance.

No. 88,471.

Patented Mar. 30. 1869.

Fig. 1.



Witnesses.
Simon Emery.
Moses Goodwin

Fig. 2.

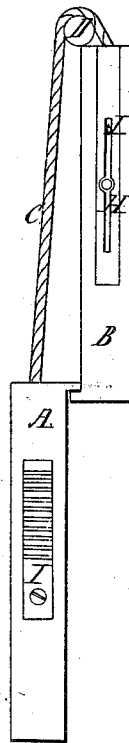
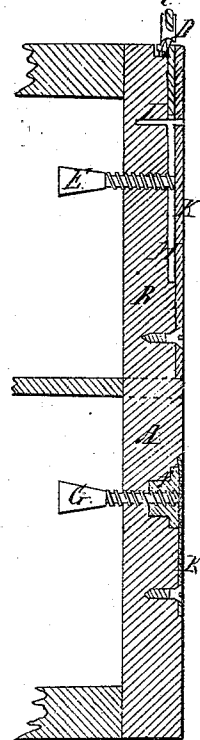


Fig. 3.



Inventor
Lewis Goodwin



LEWIS GOODWIN, OF BANGOR, MAINE.

Letters Patent No. 88,471, dated March 30, 1869.

IMPROVEMENT IN SASH-BALANCE.

The Schedule referred to in these Letters Patent and making part of the same.

To all whom it may concern:

Be it known that I, LEWIS GOODWIN, of Bangor, in the county of Penobscot, and State of Maine, have invented a new and improved "Sash-Adjustment;" and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable others skilled in the art to make and use my invention, reference being had to the accompanying drawings, and to the letters of reference marked thereon, of which said drawings—

Figure 1 is a perspective view of a window-frame and sash.

Figure 2 is a side view of the window-stiles.

Figure 3 is a sectional view of the window-stiles.

All show the application of my invention.

I will now describe the construction and operation of my invention.

The window-frame and sash being constructed in the usual form and manner, I then provide the metal strip, I, which has a roughened, or corrugated surface, and I secure the same in a groove, or recess in the window-stile A, by means of a screw at one end, as shown in figs. 2 and 3.

I then provide the nut *f* and the metal thumb-screw G, which thumb-screw passes through the stile A, and rests against the strip I, as shown in fig. 3.

I then provide the metal slide H, which is slotted, to travel on the pin I, and perforated, as shown in fig. 2, to allow the end of the thumb-screw E to pass through it, the diameter of the screw being greater than the width of the slot, so that the screw cannot travel in it.

I place the slide H in a groove, or recess, in the window-stile B, as shown in figs. 2 and 3,

I then provide the metal, or wooden strip, K, and secure the same in the groove in the window-stile B, and over the slide H, by means of a screw at one end, as shown in fig. 3.

I then provide the thumb-screw E, which passes through the stile B and slide H, and rests against the strip K, as shown in fig. 3.

I then provide the metal pulley D, and secure the same in the head of the sash-frame, just above the parting-strip *m*.

I then connect the window-cord C to the stile A, in the usual manner, and to the slide H in the stile B, as shown in figs. 2 and 3.

I provide the other stile, of the upper half of the

window, with similar slide, strip, thumb-screw, pulley, &c., and will call them here, H' K' E', &c.

In operation, the halves of the window being then in the position shown in fig. 1, the screw G is turned inward, and presses the strip I against the sash-frame, and the lower half of the window is securely fastened.

The screw E being turned inward, passes through the perforation in the slide H, and presses the strip K against the sash-frame, and thus the upper half of the window is securely fastened.

When it is desired to open the window, the screw G may be turned out, and the lower half raised, without lowering, thereby, the upper sash, or the thumb-screws G and E may both be turned out so far, that the strips I and K may not be pressed against the sash-frame; screw E, however, not being so far turned outward as to allow H to slide on the pin I; and in that case, as the lower half of the window is raised, the upper half will drop an equal distance, the two halves of the window acting as balance-weights to each other.

When, however, it is desired to drop the upper half of the window, without raising the lower half, the thumb-screws E and E' are turned out of the perforations in the slides H and H', respectively; then, as the window is lowered, the slides are drawn out of the window-stiles, and the pins *l* and *l'* travel the entire length of the slots in the slides, and, upon reaching the lower end of the slots, act as stops.

This sash-adjustment is very cheap and durable, and readily applicable to any of the cheap windows now in use.

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

1. A sash, provided with a strip, K, slide H, pin *l*, and screw E or E', said screw serving the double purpose of holding the sash in position, and of retaining or releasing the slide, substantially as set forth.

2. The combination, with the devices embraced in the preceding claim, of a cord and pulley, connecting the upper and lower sashes.

3. The combination of the devices embraced in the last preceding claim, with a friction locking-device, applied to the lower sash, substantially as set forth.

LEWIS GOODWIN.

Witnesses:

SIMON EMERY,

MOSES GOODWIN.