

C. HARBAUGH.
Sash-Balances.

No. 145,173.

Patented Dec. 2, 1873.

Fig. 1.

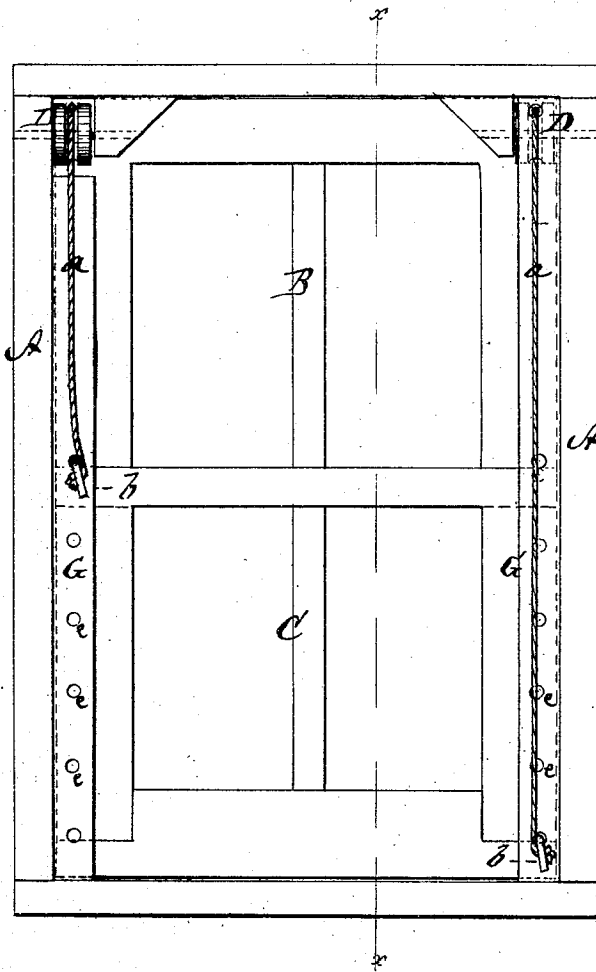
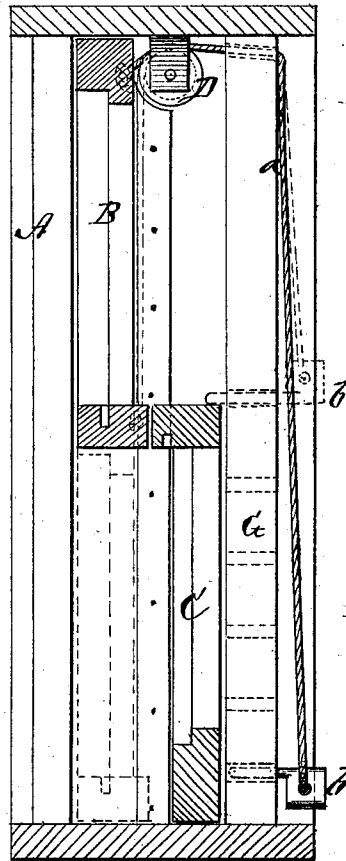


Fig. 2.



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UNITED STATES PATENT OFFICE.

CHARLES HARBAUGH, OF EATON, OHIO.

IMPROVEMENT IN SASH-BALANCES.

Specification forming part of Letters Patent No. **145,173**, dated December 2, 1873; application filed November 8, 1873.

To all whom it may concern:

Be it known that I, CHAS. HARBAUGH, of Eaton, in the county of Preble and State of Ohio, have invented certain new and useful Improvements in Hoisting, Lowering, and Locking Window-Sash; and I do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings and to the letters of reference marked thereon, which form a part of this specification.

My invention relates to, and consists in, the construction and arrangement of a device for raising, lowering, and locking window-sash, as will be hereinafter more fully set forth and pointed out in the claim.

In order to enable others skilled in the art to which my invention appertains to make and use the same, I will now proceed to describe its construction and operation, referring to the annexed drawing, in which—

Figure 1 is a front view of a window-frame, with sash, embodying my invention; and Fig. 2 is a transverse vertical section of the same through the line *xx*, Fig. 1.

A represents the window-frame; B, the upper, and C the lower, sash, constructed in any of the known and usual ways. In the top of the frame A, on each side, is a pulley, D, which may be let into the frame or otherwise arranged to suit convenience. Over these pulleys D D pass two cords, *a a*, one of which is attached to the upper sash, B, and the other to the lower sash, C. The cords *a a* hang down in front, one on each side of the window, and to their free ends are attached keys or pins *b b*, which are inserted in holes *e e* made in the strips G

G, which confine the lower sash to the window-frame.

One cord and key operate the upper sash, and the other cord and key operate the lower sash. By changing the keys *b b* in the various holes in the strips G G, the sash are held at any point desired, and the upper sash, B, is locked, inasmuch as it cannot be lowered any farther from the outside. The lower sash, C, is locked by making a series of holes in the side of the sash corresponding with those in the strip, and causing the end of its key to enter the same. The sash may be provided on its edges with one or more rollers to cause the same to move easily up and down.

This device is simple and cheap, and yet durable and effective for the purposes intended, and can be applied to any window, dispensing with the box-frames and weights.

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

The strips G G, provided with holes *e e*, in combination with cords *a a*, keys *b b*, and sash B C, the parts being constructed and arranged either to admit of any desired adjustment of the sash, or to lock the same securely, when required, by means of keys *b b* and cord *a*, substantially as herein set forth.

In testimony that I claim the foregoing as my own invention I affix my signature in presence of two witnesses.

CHAS. HARBAUGH.

Witnesses:

JAMES B. STEVENS,
R. Y. LANIUS.