

(Model.)

A. ANDERSON.

SASH BALANCE.

No. 244,513.

Patented July 19, 1881.

Fig. 1.

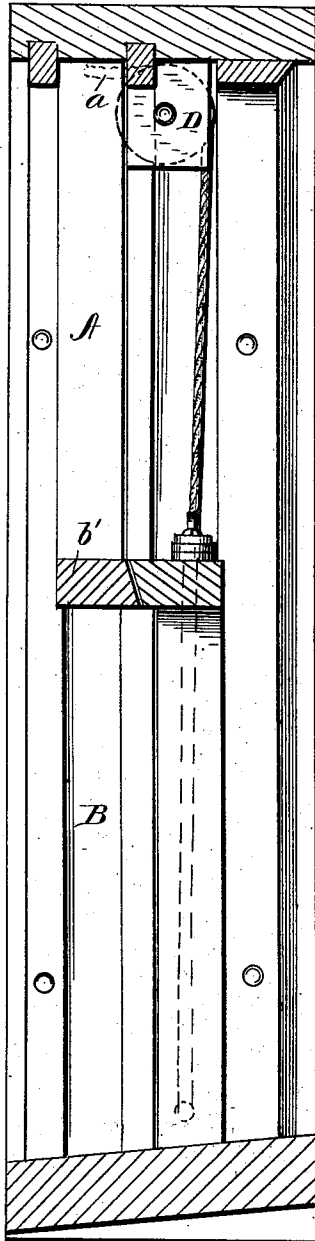


Fig. 2.

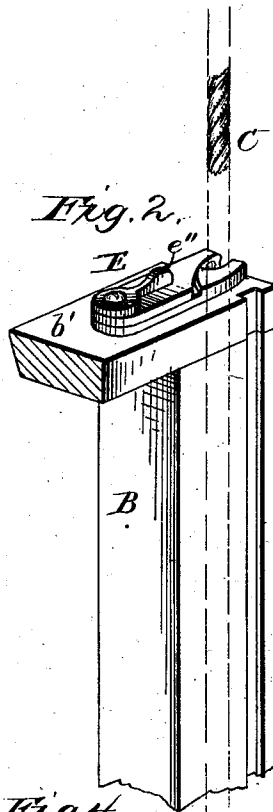


Fig. 3.

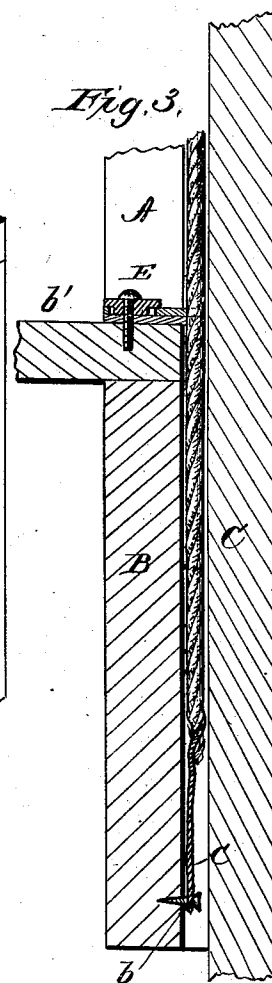
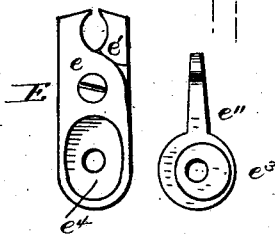


Fig. 4.



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SASH-BALANCE.

SPECIFICATION forming part of Letters Patent No. 244,513, dated July 19, 1881.

Application filed April 11, 1881. (Model.)

To all whom it may concern:

Be it known that I, ANDREW ANDERSON, of Burlington, Des Moines county, Iowa, have invented a new and useful Improvement in Window-Sash Balances, of which the following is the specification.

Figure 1 is a side sectional elevation taken on a line through the center of the sash. Fig. 2 is a detail, in perspective, of the clamp used to detain the sashes at any desired position. Fig. 3 is a detail, in section, on a central line through Fig. 2, showing cord and rubber spring which form the connection between the two parts of the sash; Fig. 4, details, one in top plan of the jaws of the clamp, the other bottom plan of the handle.

This invention belongs to that class of devices known as "window-sash balances;" and the novelty consists in the construction and arrangement of the several parts, as will now more clearly and fully be set out and explained.

In the accompanying drawings, A denotes any upper window-sash properly set in its frame, and B the lower sash. These are connected by means of cord C, which is secured at *b* to or upon the lower part of sash B, and thence extending up the frame, and, passing over the pulley D at the top, is fastened at *a* to or upon the upper part of sash A. Thus the two sashes are so connected to each other as that the one may be used to counterbalance the other. When the sash A is pulled down the sash B is simultaneously raised in the same proportion, and when the window is thus opened the weight of the two sashes will so nearly counterbalance each other that in most positions they will remain when once moved thereto. To insure against any damage—as from a sudden jerk or accidental strain—a piece of india-rubber, *e*, is secured to the lower end of the cord C, where it is attached to the sash B. Thus the cord C is rendered, to all intents, practically elastic, but yet only sufficiently so as to accomplish the ends above generally suggested.

It is also desirable sometimes to render the cord-connection between the two sashes as near as may be non-elastic for the purpose of preventing any vibratory or other up or down movement of either when the window is more or less open. This is attained by means of the clamp E, which is placed on the upper horizontal piece, *b'*, of the sash B. This clamp is composed of the jaws *e e'*, which work on the screw by which they are pivoted to the piece *b'*, and they are operated by the handle *e''*. The inner faces of the jaw ends are rounded out, so as to allow the cord C to pass through when the jaws are properly fixed for that purpose; but when they are drawn toward each other by turning the handle *e''*, which has on its under side the cam-shaped piece *e³*, working in the cam-slot *e⁴* in the outer end of the upper jaw, *e*, said jaws will be made to grasp tightly upon the cord C, and thus serve to hold the sash B steady at any desired point.

By my invention, as above described, I have produced a simple and effective device for accomplishing the desired ends.

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

1. In a window-sash balance, the clamping device E, composed of jaws *e* and *e'*, having the inner faces of their front ends rounded out, and in the rear part of the upper jaw a cam-slot, *e⁴*, and combined with the handle *e''*, having cam *e³* on its under face, substantially as shown and described.

2. The combination of sashes A and B with cord C, having the rubber *e* and clamp E, constructed as described, and placed just above said elastic, substantially in the manner and for the purpose set forth.

ANDREW ANDERSON.

Witnesses:

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