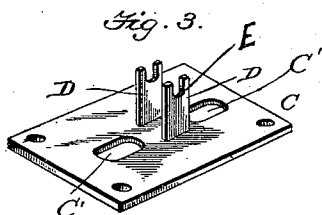
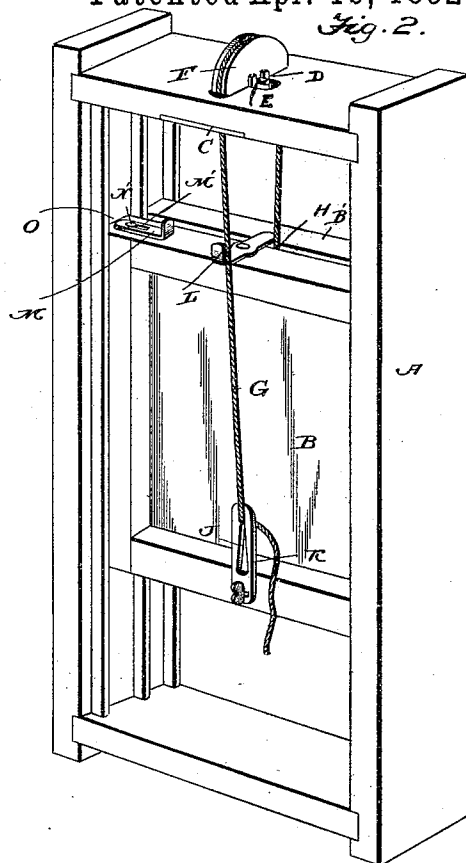
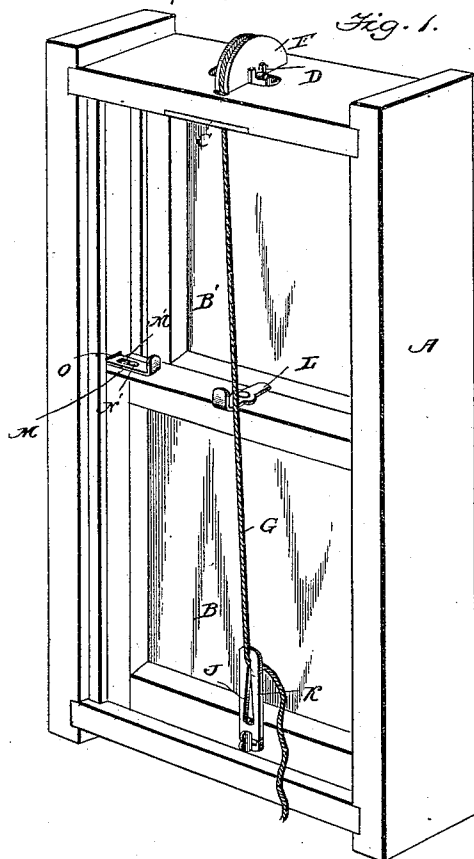


(No Model.)

C. E. WHIPPLE.
SASH BALANCE.

No. 473,169.

Patented Apr. 19, 1892.



Witnesses:

W. H. Ashing
Wm. H. Beaton

Charles E. Whipple

INVENTOR:

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ATTORNEY.

UNITED STATES PATENT OFFICE.

CHARLES EDWARD WHIPPLE, OF SEVERY, KANSAS.

SASH-BALANCE.

SPECIFICATION forming part of Letters Patent No. 473,169, dated April 19, 1892.

Application filed November 3, 1891. Serial No. 410,750. (No model.)

To all whom it may concern:

Be it known that I, CHARLES EDWARD WHIPPLE, a citizen of the United States, residing at Severy, in the county of Greenwood and State of Kansas, have invented certain new and useful Improvements in Sash Balances and Locks; and I do 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, 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 improvements in sash balances and locks; and one object of my invention is the provision of a sash-balance which will be capable of supporting or balancing the sashes at any place in the casing, as circumstances require, and which will not be unsightly in appearance, and which can be applied to the casing with ease and without marring or damaging the casing.

Another object of my invention is the provision of means which can be readily applied to the casing without injuring the same, and which means will be disposed in such manner as to be out of view but of easy access when found necessary.

Another object of my invention is the provision of means for balancing and locking the sashes, which will be easy to operate and efficient, which will be strong and durable to withstand the usual hard usage, and which can be produced at a very moderate cost.

To attain the desired objects the invention consists in certain novel features of construction and arrangement of parts, substantially as disclosed in the accompanying drawings and the following description.

Figure 1 represents a perspective view of my improvement with the sashes closed and locked. Fig. 2 represents a perspective view with the sashes balanced to leave an opening above and below. Fig. 3 represents a perspective view of the plate or bracket.

Referring by letter to the drawings, A designates the frame or casing of the window, in which are arranged and adapted to travel the lower sash B and the upper sash B', the usual

guides being provided. In the top rail of the casing, in a suitable mortise therein, I secure the plate C, having thereon the upward extending lugs D, provided with bearings E for the studs or journals of the pulley or guide-wheel F. From this construction it will be seen that but little of the casing is cut to apply the bracket and pulley, and that the same is entirely hid from view, thereby not marring the appearance of the casing.

The plate C is provided with openings C', through which pass the branches of the cord or chain G, one end of which is secured to the upper sash, as at H, and the other end entering the slot J in the plate K, which is pivoted or secured to the lower sash. The slot J in the plate is tapering and gradually tapers from the lower to the upper end of the plate, as clearly shown.

From this construction it is evident that the sashes can be readily and quickly moved in the casing and retained at any point by passing the free end of the cord through the slotted plate, the small end of the slot effectually retaining the cord and of course the sashes at any adjustment. On the top of the lower sash is a pivoted catch L, adapted to engage the upper sash when the sashes are in line, and on the top of the lower sash at one side is a plate M, having a slot M' to receive a stud N', and this plate or sliding catch is adapted to enter a notch or recess O in the casing, and thereby lock the sashes and prevent opening them from the inside, as is evident. It will thus be seen that I provide a simple, strong, cheap, and efficient device, which can be easily applied, and which does not materially damage or mar the appearance of the casing or window.

I claim—

1. The combination of the casing having a recess and opening in the upper rail, the sashes mounted in the casing, the plate fitting in the recess of the casing, the uprights on the plate, having open bearings, the pulley detachably connected or mounted in said bearings, and the cord passing over the pulley and connected to the sashes.

2. The combination of the casing having the opening in the upper rail, the sashes

mounted in the casing, the plate having the
uprights arranged in the opening of the cas-
ing and provided with open bearings, the
pulley detachably mounted in said bearings,
5 the plate with wedge-shaped slot, and the
cord passing over the pulley and connected
to the plate and sash.

In testimony whereof I affix my signature in
presence of two witnesses.

CHARLES EDWARD WHIPPLE.

Witnesses:

JOHN R. TOLER,
V. G. PIERCE.