E. E. ETHRIDGE.

COMBINATION STOP AND WEIGHT GUIDE FOR WINDOWS.

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1,287,657. Patented Dec. 17, 1918.

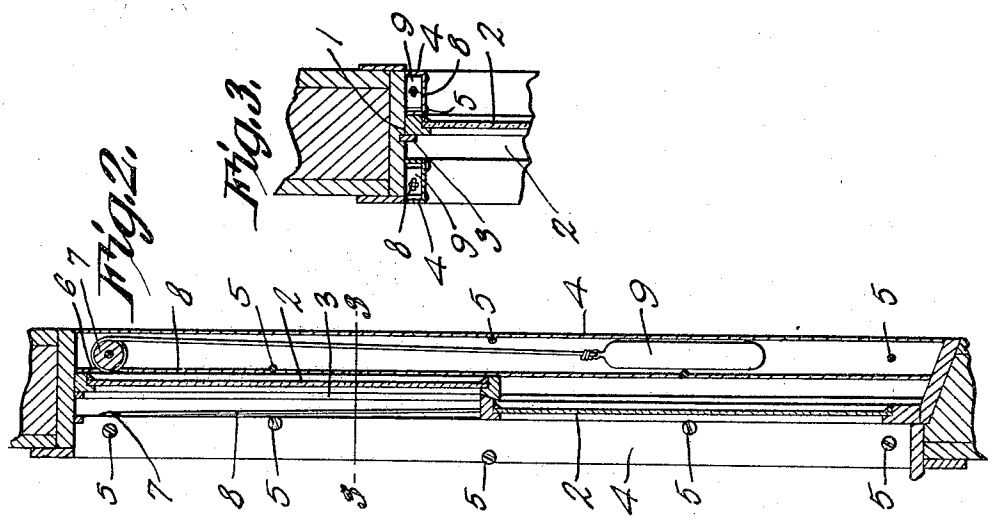


Fig. 3.

Fig. 2.

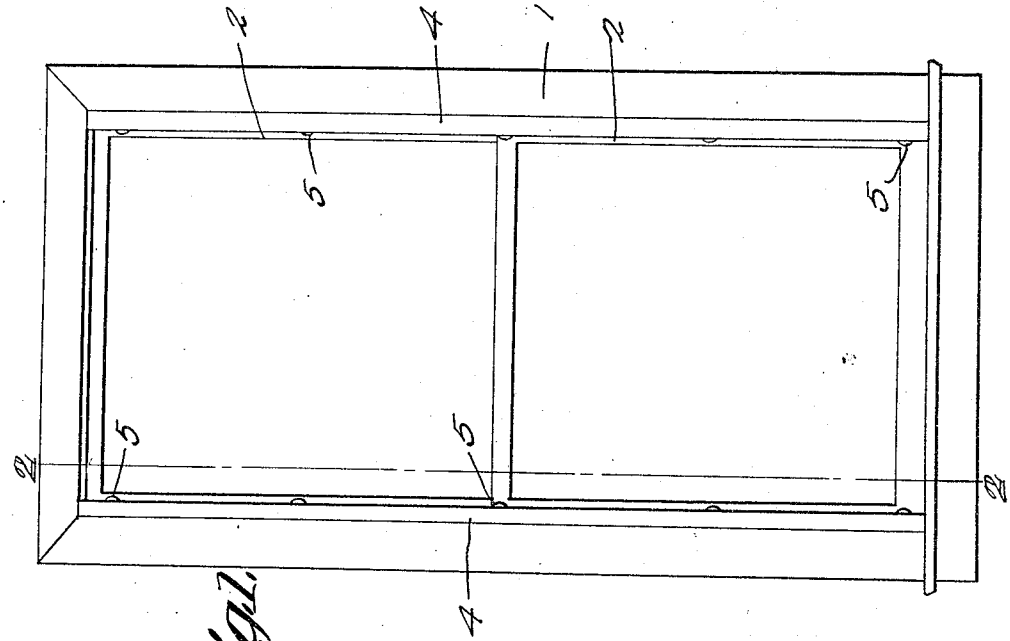


Fig. 1.

Witnesses

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COMBINATION STOP AND WEIGHT-GUIDE FOR WINDOWS.

1,287,657. Specification of Letters Patent. Patented Dec. 17, 1918.

Application filed November 20, 1916. Serial No. 132,436.

To all whom it may concern:

Be it known that I, ELLSWORTH E. ETHRIDGE, a citizen of the United States, residing at Shannon, in the county of Carroll and State of Illinois, have invented a new and useful Combination Stop and Weight-Guide for Windows, of which the following is a specification.

The present invention appertains generally to window constructions, and aims to provide novel and improved means for counter balancing the sashes in order that they can be raised and lowered easily and maintained at any position.

It is the object of the invention to provide a combination stop and weight guide for the sashes, the present device being exceedingly simple and inexpensive in construction, being readily applied to old as well as new windows, and being thoroughly practical and efficient in use.

With the foregoing and other objects in view which will appear as the description proceeds, the invention resides in the combination and arrangement of parts and in the details of construction hereinafter described and claimed, it being understood that changes in the precise embodiment of the invention herein disclosed can be made within the scope of what is claimed without departing from the spirit of the invention.

The invention is illustrated in the accompanying drawings, wherein:—

Figure 1 is a face view of a window illustrating the improvements embodied therein.

Fig. 2 is a vertical section taken on the line 2—2 of Fig. 1.

Fig. 3 is a horizontal section taken on the line 3—3 of Fig. 2.

The present improvements can be incorporated in a window frame or casing 1 of any ordinary or suitable construction. The numerals 2 designate the sashes, and 3 the parting strips.

In carrying out the invention, hollow stops 4 are secured to the jambs of the window frame or casing at the opposite sides of the parting strips 3 to provide the sash ways. These stops 4 can be of various shapes and formations, to conform to the construction and ornamentation of various window frames and casings. As illustrated, the stops 4 are of channel iron form, having their flanges projecting toward and resting against the jambs of the window frame, one flange of each stop facing the respective parting strip to provide the sash way.

The channel-shaped stops 4 are fastened to the window frame by means of screws 5 or equivalent securing elements engaging through the backs of the stops and taking into the window frame whereby to press the edges of the stops against the jambs. The stops are preferably coextensive in length with the jambs so as to abut against the sill and lintel. The intermediate screws or securing elements 5 of each stop are in staggered relation and arranged close adjacent to the flanges of the stop, whereby they will not interfere with the vertical movement of the counter weight.

Each stop 4 has its inner flange or that flange facing the parting strip provided with an opening 6 adjacent to the upper end of the stop, and a pulley wheel or guide 7 is rotatable within the stop adjacent to said opening to project partially through the opening. The pulley wheel 7 is carried by the uppermost screw or element 5, and a cord or flexible element 8 is passed over the pulley wheel or guide 7 and has one end attached in any suitable manner to the respective sash 2. A counter weight 9 is attached to the other end of each cord and is movable vertically within the respective hollow or channel-shaped stop. The ends of the counter weight are preferably rounded or pointed so that the counter weight can move past the screws 5 without catching, if the intermediate screws are arranged upon the inner sides of the flanges.

The channel-shaped members 4 therefore serve the dual functions of stops and counter weight guides, and can be readily applied to the window frame or casing, whether it be an old or a new one. By combining the stop and weight guide, this provides for economy, and enables old window frames and casings to be provided with the counter weights for the sashes in a convenient and simple manner, without entailing prohibitive alterations or expense. By removing the stops, the sashes can be removed easily, and the counter weights are then accessible and removable, so that repairs and adjustments can be made with greater ease than with ordinary counter weight devices for windows.

Having thus described the invention, what is claimed as new is:—

In a device of the class described, a casing having a flat outer face; a channel of rectangular cross section and comprising an outer wall, and flanges having their inner edges bearing against the flat outer face of the casing, one flange having an opening; a weight slidably received in the channel, the flanges being of sufficient width to permit the weight to be housed completely in the channel exteriorly of the flat outer face of the casing; a parting strip mounted on the casing; a sash slidable between the parting strip and said flange; securing devices passing through the outer wall of the channel and engaging the casing, the securing devices extending along the inner face of said flange, in contact therewith, to reinforce said flange against the lateral pressure of the sash; a guide in the channel adjacent to the opening; and a flexible element extended through the opening and across the guide, one end of the flexible element being attached to the sash, and the other end of the flexible element being attached to the weight.

In testimony that I claim the foregoing as my own, I have hereto affixed my signature in the presence of two witnesses.

ELLSWORTH E. ETHRIDGE.

Witnesses:

C. H. BOWERS,

DONALD CHISHOLM.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."