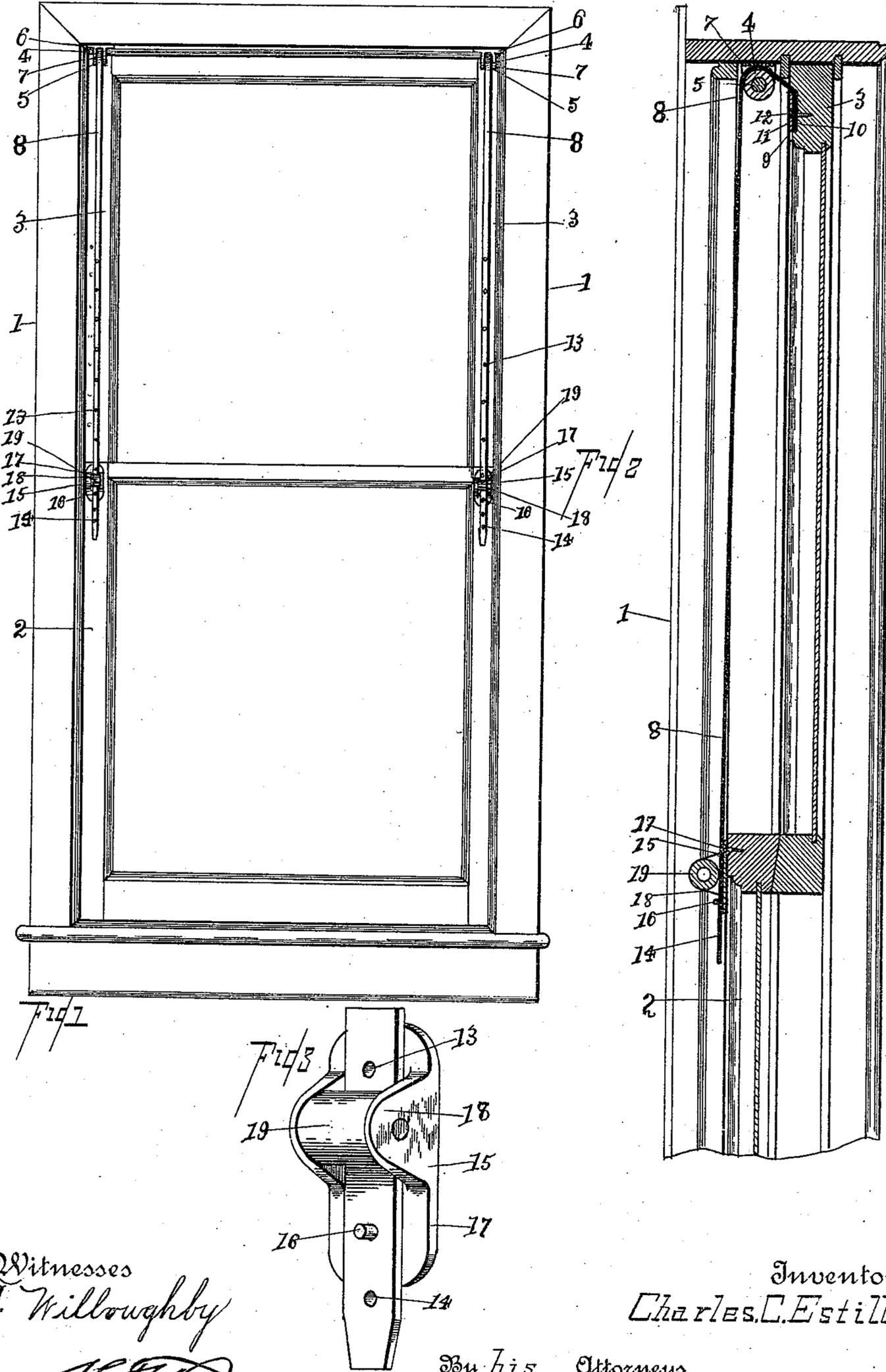


(No Model.)

C. C. ESTILL.  
SASH BALANCE.

No. 429,610.

Patented June 10, 1890.



Witnesses  
*J. Willoughby*  
*H. J. Riley*

Inventor  
*Charles C. Estill*

By his Attorneys  
*C. Snow & Co.*

# UNITED STATES PATENT OFFICE.

CHARLES C. ESTILL, OF GRAPE VINE, TEXAS.

## SASH-BALANCE.

SPECIFICATION forming part of Letters Patent No. 429,610, dated June 10, 1890.

Application filed March 28, 1890. Serial No. 345,751. (No model.)

*To all whom it may concern:*

Be it known that I, CHARLES C. ESTILL, a citizen of the United States, residing at Grape Vine, in the county of Tarrant and State of Texas, have invented a new and useful Sash Balance and Holder, of which the following is a specification.

The invention relates to improvements in sash-balances.

The object of the present invention is to provide a combined sash balance and fastener which will be simple and inexpensive in construction and adapted to be readily attached to the ordinary construction of window frames and sashes, and which will be capable of being conveniently operated to raise and lower the sashes and maintain them in any desired position without necessitating the use of both the hands.

The invention consists in the construction and novel combination and arrangement of parts hereinafter fully described, illustrated in the accompanying drawings, and pointed out in the claim hereto appended.

In the drawings, Figure 1 is a front elevation showing a window frame and sashes provided with a sash balance and fastener constructed in accordance with this invention. Fig. 2 is a vertical sectional view. Fig. 3 is a detail view of the clasp or fastener.

Referring to the accompanying drawings, 1 represents a window-frame of the ordinary construction, having the vertically-sliding sashes 2 and 3, and provided at its top with a roller or pulley 4, that is mounted in a suitable hanger 5, that consists of the plate 6 and the integral depending ears 7. The sashes 2 and 3 are connected together and operated by a strap or flexible strip 8, that has one end 9 arranged in a recess 10 in the upper portion of the upper sash 3, and is secured in said recess by a plate 11, having its lower or inner face, which is contiguous to the strap, serrated or roughened, and is provided with a perforation 12, through which passes a screw that secures the plate to the sash. The strap is provided with a series of holes 13, and has its end 14 engaging a clasp or fastener 15, that is provided with a stud or pin 16, adapted to engage the holes of the strap and maintain the sashes at any desired elevation.

The clasp or fastener 15 consists of the plate 17, that is perforated and screwed to the sash, and is provided with a pair of integral ears 18, that are perforated and have mounted between them a roller 19, the journals of which find bearings in the perforations of the ears. The strap passes under the roller 19, and by pulling with one hand upon the end 14 of the strap the latter is readily disengaged from the pin 16, and the sashes may be readily raised by pulling upon the strap or lowered by releasing the strap and allowing the lower sash to fall; and the said sashes may be maintained at any height by engaging the stud or pin 16 in one of the holes of the strap.

From the foregoing it will readily be seen that the combined sash balance and fastener is simple and inexpensive in construction, is adapted to be readily attached to the ordinary construction of windows, and is capable of ready and positive operation to maintain the sashes at any desired elevation, and only necessitates the use of one hand.

Webbing or other flexible material may be used instead of leather, and two sets of balances may be employed, and this construction is preferable with windows having a single pane, and then one set is arranged at each side of the window.

Having thus described my invention, I claim—

The combination, in a sash-balance, of the strap provided with a series of holes and designed to have one end secured to the upper sash of a window, the hanger 5, secured to the top of the window-frame and provided with the roller 4, the clasp or fastener secured to the lower sash and consisting of the plate having the ears and provided with a roller 19, journaled in the ears and having the pin or stud 16 arranged to engage the hole of the strap, substantially as described.

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

CHARLES C. ESTILL.

Witnesses:

J. S. TUCKER,  
J. B. RICHMOND.