

(No Model.)

T. G. WILLIAMS.

SASH BALANCE.

No. 353,241.

Patented Nov. 23, 1886.

Fig. 1.

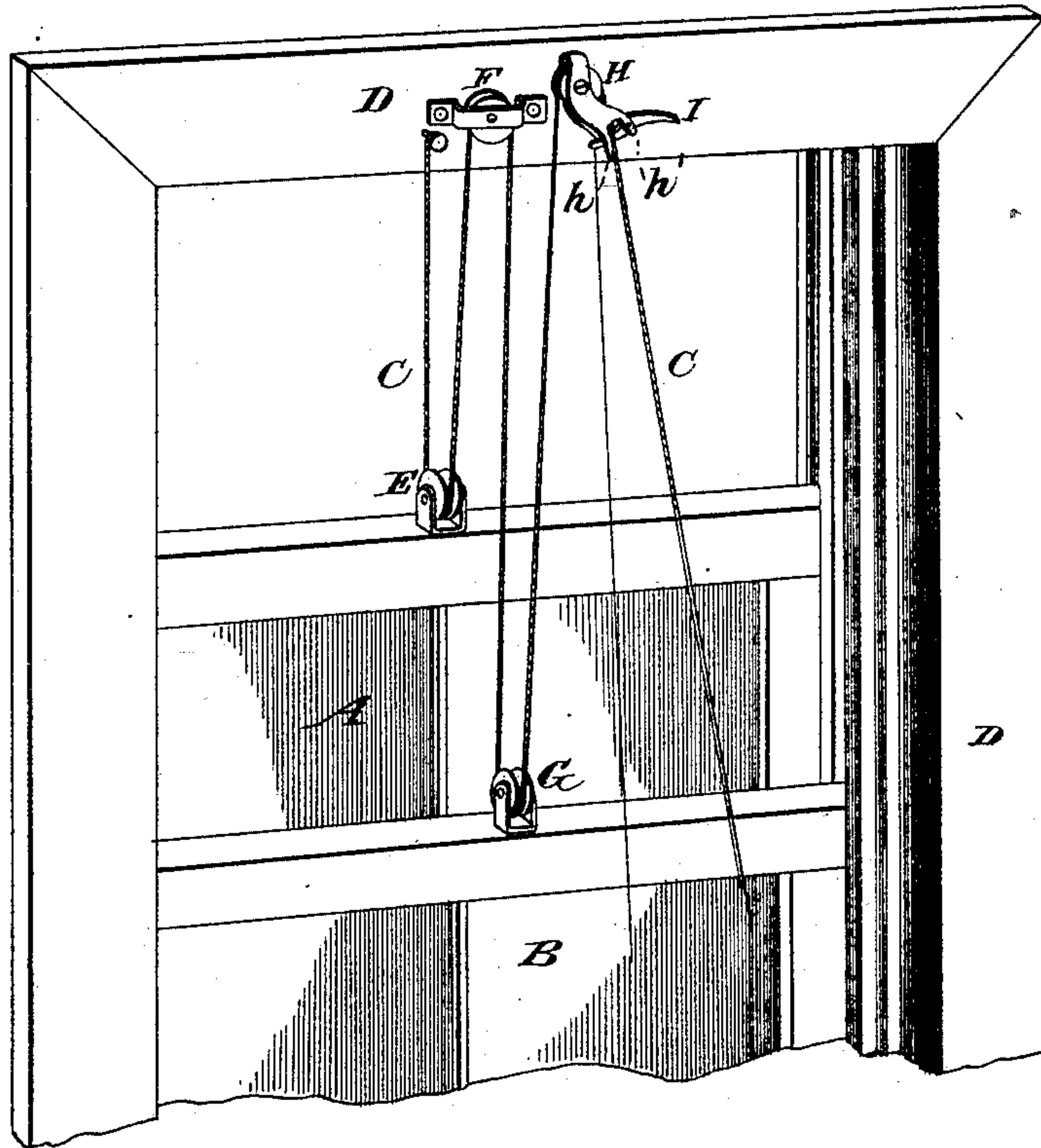
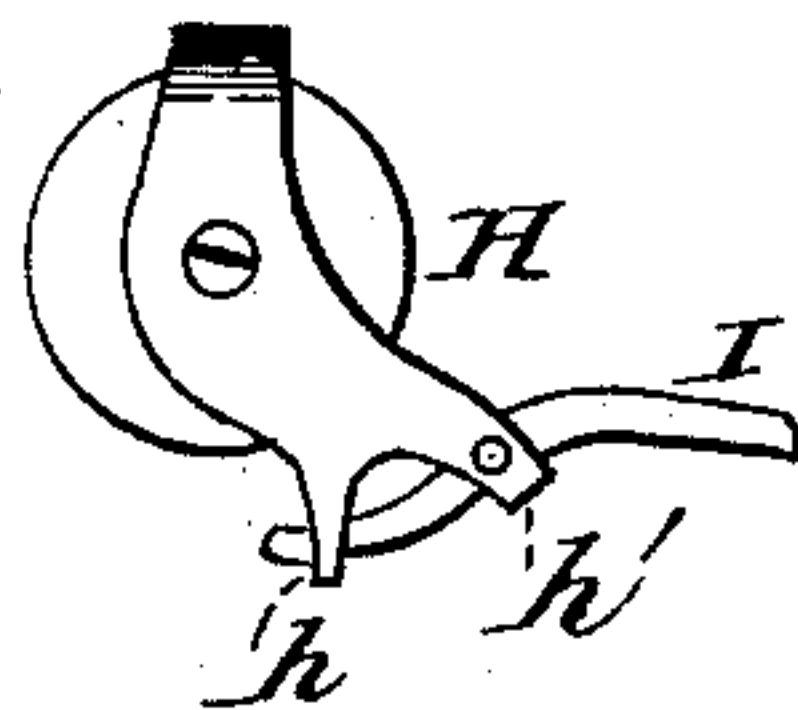


Fig. 2.



Witnesses.
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TALLIE GRAHAM WILLIAMS, OF CEDAR PLAINS, ALABAMA.

SASH-BALANCE.

SPECIFICATION forming part of Letters Patent No. 353,241, dated November 23, 1886.

Application filed September 27, 1886. Serial No. 214,603. (No model.)

To all whom it may concern:

Be it known that I, TALLIE GRAHAM WILLIAMS, a citizen of the United States, residing at Cedar Plains, in the county of Morgan and State of Alabama, have invented certain new and useful Improvements in Sash-Balances; 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 and figures of reference marked thereon, which form a part of this specification.

The invention will first be described in connection with the drawings, and then clearly pointed out in the claim.

Figure 1 of the drawings is an elevation in perspective, and Fig. 2 a detail view.

In the drawings, A represents the upper and B the lower sash of a window.

C is a cord attached to the top of a window-casing, D; E, a pulley attached to the top sash, A; F, a pulley mortised in the casing D; G, a pulley arranged on the top bar of the bottom sash, B, and H an adjustable pulley secured to the upper part of the casing.

From the cuff of the pulley H extends the projection h , which stands perpendicular to said pulley, is flat and slightly smaller than the cord C. Forking the projection h , and fastened by a projection, h' , from the pulley H, is the adjuster I, which catches the cord C.

The fork of pulley H is provided with a small string, h^2 , which serves to hold off the adjuster.

By the cords C the sashes may be moved up or down, held on a balance, or fixed at any point preferred in the window-frame. The desired tension is maintained when the cord elevates or lowers the bottom sash, or when the lower sash is moved to give any desired degree of ventilation. With the upper sash the operation is the same.

The pulleys are so arranged as to allow a minimum of friction, and the cords by which the sashes are moved may be pulled from any part of a room.

Where the sash is cut for the attachment of the pulleys it is supported by the pulley-plate, so that there may be no diminution of power.

Having thus described all that is necessary to a full understanding of my invention, what I claim as new, and desire to protect by Letters Patent, is—

In a sash-balance, the combination, with sashes and window-frame, of a cord, C, pulleys E F G H, and forked adjuster I, said pulley H having projections $h h'$ and string h^2 , as and for the purpose set forth.

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

TALLIE GRAHAM WILLIAMS.

Witnesses:

W. T. ODEN,

W. G. FOWLER.