

No. 869,512.

PATENTED OCT. 29, 1907.

C. H. OCUMPAUGH.
CASING FOR SASH BALANCES AND PULLEYS.

APPLICATION FILED OCT. 24, 1905.

2 SHEETS—SHEET 1.

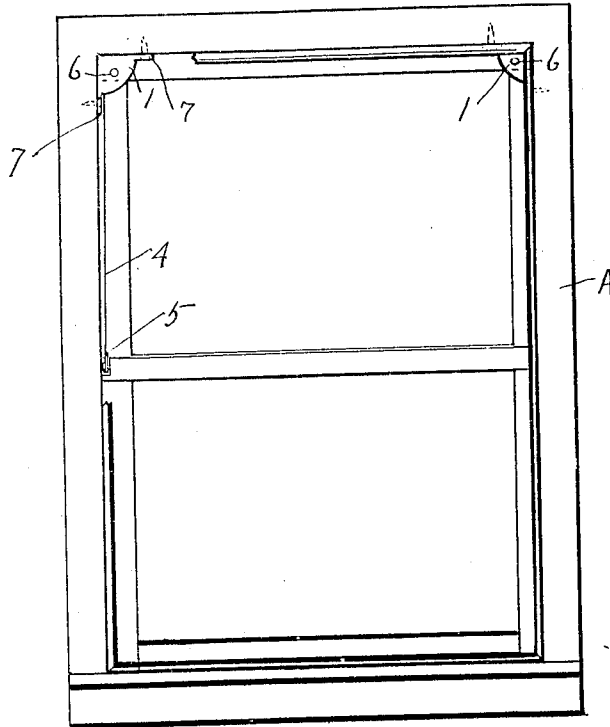


Fig. 1.

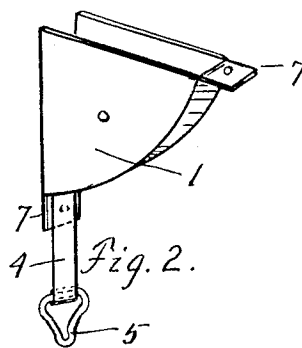


Fig. 2.

WITNESSES.

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Henry Haight

INVENTOR

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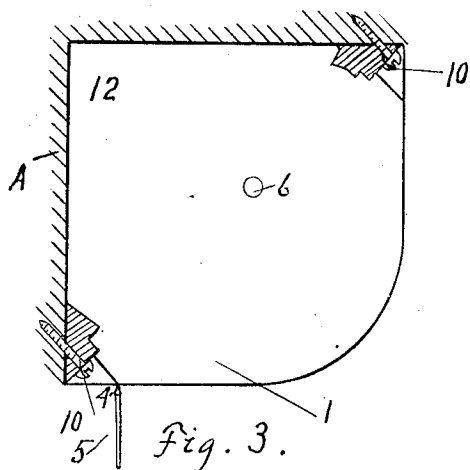


Fig. 3.

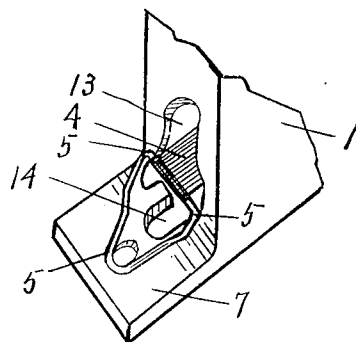


Fig. 4.

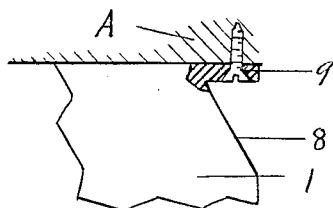


Fig. 7.

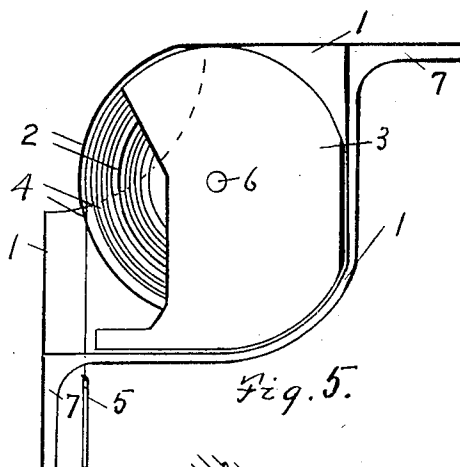
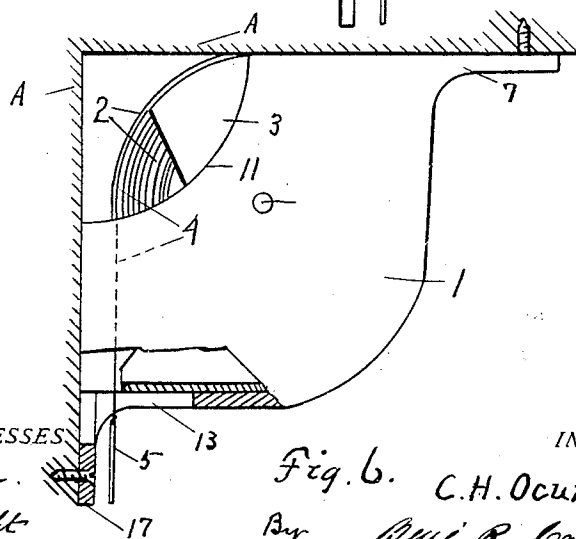


Fig. 5.



WITNESSES

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Fig. 6. C. H. Ocumpaugh,
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UNITED STATES PATENT OFFICE.

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CASING FOR SASH BALANCES AND PULLEYS.

No. 869,512.

Specification of Letters Patent.

Patented Oct. 29, 1907.

Application filed October 24, 1905. Serial No. 284,153.

To all whom it may concern:

Be it known that I, CHARLES H. OCUMPAUGH, a resident of Rochester, in the county of Monroe and State of New York, have invented certain new and useful Improvements in Casings for Sash Balances and Pulleys; and I do hereby 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 pertains to make and use the same.

This invention relates to spring sash balances and has for its object to provide a simple and efficient construction adapted for application by unskilled persons to a window casing or other structure without the necessity of a mortise and without any modification of the wood work, and the invention consists in the construction hereinafter described and pointed out.

In the accompanying drawing forming part of this specification—Figure 1 is an elevation of a window casing and the improved balance; Fig. 2 is a perspective, on a larger scale, of one form of the improved sash balance case; Figs. 3 and 6 are side views of modifications of the casing; Fig. 4 is a partial perspective of a casing; Fig. 5 is a side view of the device with modified casing, the front side being omitted; and Fig. 7 is a partial side view of a modified casing.

The letter A denotes a window frame having sash runways at the sides and top (see Fig. 1). Numeral 1 denotes a sash balance casing fixed in the sash runways and having practically, that is, approximately, a triangular outline. It is adapted to contain a hood or spring drum 2 and cup 3. The casing has two faces in planes including a right angle, the face opposite said angle being preferably curved as indicated. A tape is denoted by 4, and 5 indicates an eye or loop whereby connection may be made with a sash. 6 is a rivet or drum axis. These parts may be of any usual or preferred form adapted to cooperate with the casing which is shaped substantially as shown so that it may be fastened in an angle of the wood or other work and exteriorly to the surface of the woods or other material of the frame whereby to obviate the necessity of mortises or recesses. It is provided with means, such as the screw plates or flanges 7, having suitable screw holes for screws or the like whereby it can be attached to surfaces disposed at an angle to each other. These flanges are preferred but recesses 8 and screw holes 9 substantially as indicated in Fig. 7 can be substituted, or inclined holes 10 as indicated in Fig. 3 may be employed.

In some cases one face of the casing may be omitted as shown in Fig. 5. And the casing may be otherwise modified provided its adaptability for application to the angle of a window frame or casing or the like is not destroyed. It is preferred sometimes to cut

away as at 11 what would otherwise be an angular part 12, indicated in Fig. 3, to facilitate manipulation in the assemblage of spring drum and casing.

In the casing an opening or slot 13 is provided for the passage of the tape. The loop or eye is, at its widest part, wider than said runway to avoid its being drawn within the casing. 14 denotes a slot communicating with the opening 13. This provides for passing the eye 5 from the inside to the outside of the casing the eye and contiguous part of the tape being suitably turned edgewise for the purpose.

From the foregoing it will be obvious that the drum casing being adjacent the inner surface of the frame and in the path of the lower sash will act as a stop therefor; and further that the usual frame of the window or the like needs no modification either for the application or the repair of the balance and that any person capable of putting in the screws can suitably attach the casing.

Further, any of the modified details illustrated can be employed without materially affecting the operation of other details and without departure from the main improvement.

I am aware that a spring balance casing of approximately triangular outline and provided with means for fixing its upper edge to a sash above it and having an opening in its bottom for the passage of tape, has been proposed. My improvement contemplates fixing the casing to the top of a window frame contiguous the upper horizontal runway of an upper sash and comprises other practical features specifically pointed out hereinafter.

Having described the invention what I claim is—

1. The combination, in a spring sash balance, of a drum casing having two flanges extending in planes at right angles to each other, and a spring-holding drum between the planes of the flanges, said casing having open top and side edges adapted to be closed by the window frame when the casing is connected to the frame at an interior angle thereof.

2. A window frame, a sash, a spring sash balance casing provided with means for its attachment to the inside of the upper corner of said window frame and to the frame wall inclosing said corner, and a sash balance in said casing.

3. A window frame, a sash runway, a spring sash balance casing provided with means for attachment to frame surfaces including an angle and a part of the runway and having an open side or edge placed adjacent the runway, said casing being partially cut away at and within said angle to facilitate assembling the casing with a spring drum.

In testimony whereof, I have signed this specification in the presence of two subscribing witnesses.

CHARLES H. OCUMPAUGH.

Witnesses:

E. C. HEMPEL,

ADA M. GREENWOOD.