(No Model.)

W. E. DOWLING.

SASH HOLDER.

No. 551,666. Patented Dec. 17, 1895.

Fig. 1.

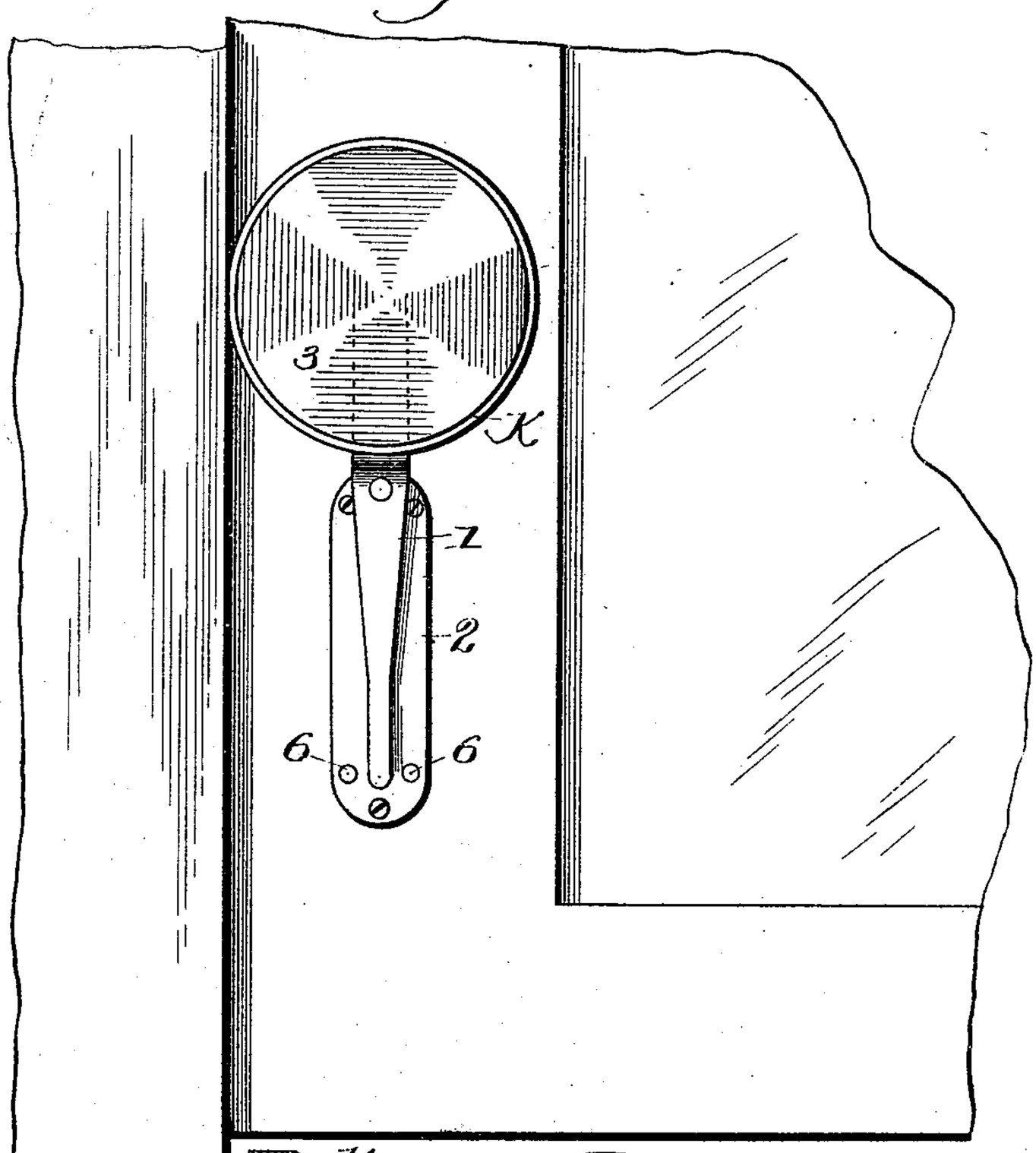


Fig. 2.

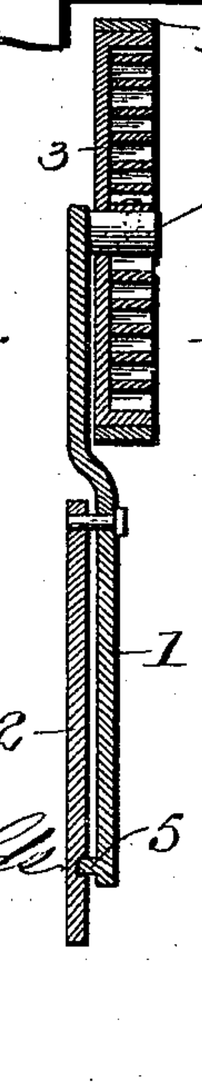
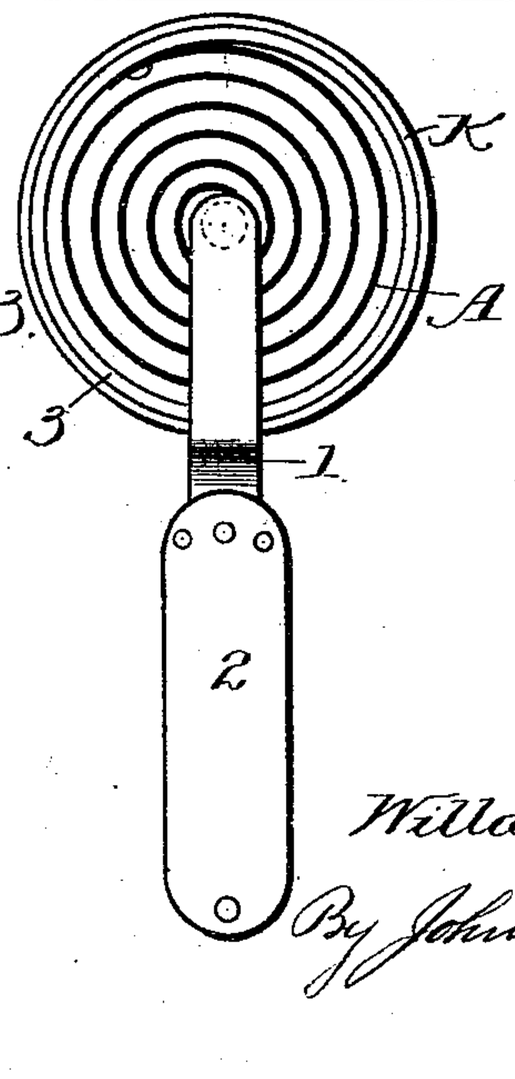


Fig. 3.



Witnesses
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UNITED STATES PATENT OFFICE.

WILLARD E. DOWLING, OF MOUNT POCONO, PENNSYLVANIA.

SASH-HOLDER.

SPECIFICATION forming part of Letters Patent No. 551,666, dated December 17, 1895.

Application filed August 16, 1894. Renewed June 8, 1895. Serial No. 552,171. (No model.)

To all whom it may concern:

Be it known that I, WILLARD E. DOWLING, a citizen of the United States, residing at Mount Pocono, in the county of Monroe and State of Pennsylvania, have invented certain new and useful Improvements in Sash-Balances; 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 appertains to make and use the same.

This invention relates to improved means for balancing sliding sash in their casement.

The invention relates to that class of devices which employ a spring-actuated drum attached to the sash and turned upon its journal when moving the sash so as to wind the spring and counteract the weight of the sash.

The purpose of the present invention is the provision of a simple and novel device which can be readily applied to either the sash or the casement, and is adjustable to be thrown in or out of operative relation, as may be required. The invention relates more particularly to the specific means whereby the sash-balancing device is thrown in and out of operative position and securely held in the located position.

The improvement consists of the novel features and peculiar construction and combination of the parts which hereinafter will be more fully described, and set forth in the claims, and which are shown in the accompanying drawings, in which—

Figure 1 is a front elevation showing the application of the invention. Fig. 2 is a side or edge view of the sash-balancing device. Fig. 3 is a vertical section rear side view of the drum and the spring-arm on which the same is mounted.

The drum 3 is centrally apertured and mounted upon the journal 4, projected laterally from an arm or lever 1. This central aperture is surrounded by a boss which forms a hub portion and provides an extended bearing for the drum in its rotary movements. The periphery of the drum may be serrated or provided with a rubber or elastic tire K to provide a frictional or engaging surface with the relatively movable part to which the attachment is applied. The reverse side of the drum is open and receives a coiled spring A, one end being attached to the inner periphery or rim of the drum and the other end to the boss or hub portion, so that a rotary movement of the drum on its journal 4 in one direction will wind the spring A, thereby producing a counterbalancing force to sustain the sash at the required position.

The arm or lever 1 is pivoted midway of its ends to a base-plate 2, and its lower end is provided with an inner extension or pin 5 to enter one of a series of notches or depressions 6 provided in the lower portion of the base-plate 2. The lower portion of the lever or arm 1 is sufficiently elastic to admit of the pin or projection 5 being pressed out of engagement with the depression 6, and when released will cause the said pin to enter the desired depression and hold the drum in the located position. This base-plate 2 is apertured to receive screws or other fastenings, by means of which the attachment is secured in the desired position.

The device is intended to be applied either to the sash or the casement and will operate successfully in either position. In cases where the periphery of the drum is serrated or toothed the corresponding portion of the sash or casement will be provided with a metallic rack for the drum to engage with. When it is desired to throw the drum out of operative position the projection or pin 5 is pressed out of engagement with one of the depressions 6 and the arm or lever 1 turned to throw the drum outward and away from its engaging part. The said pin or projection springing inward will engage the opposite depression and hold the drum in the desired position. When it is required to have the drum in operative relation, the arm or lever 1 is moved to cause the periphery of the drum to bear with sufficient tension against the opposing part. The pin or projection 5 will engage the opposing depression 6 and secure the drum in the located and required position. On moving the sash the drum will engage with the opposing part and will be rotated on its journal in the ordinary manner and wind up the spring A, thereby creating a counterbalancing force.

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

1. A sash balancing attachment compris-

ing a base plate, a lever pivoted to the base plate and adjustably connected therewith at one end, and a spring actuated drum mounted on the opposite end of the said lever and designed to be rotated by frictional or other contact with the relatively movable part, substantially as set forth.

2. The herein shown and described sash balancing attachment comprising a drum having a centrally disposed apertured boss, and open on the reverse side, a spring located in the drum and having one end attached to the boss and the opposite end to the inner periphery of the drum, a lever carrying the drum on one end and having its lower portion made flexible, and a base plate having the lever pivoted thereto, and provided with a series of depressions to receive a projection at the free end of the said lever, whereby the latter is held in the located position, substantially as set forth.

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

WILLARD E. DOWLING.

Witnesses:

AMY ENGLE,

EMMA DOWLING.