

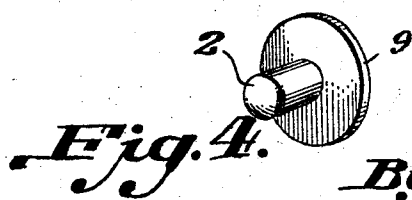
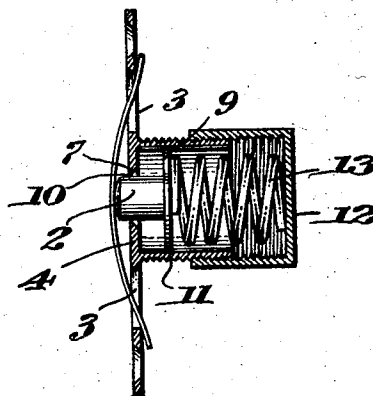
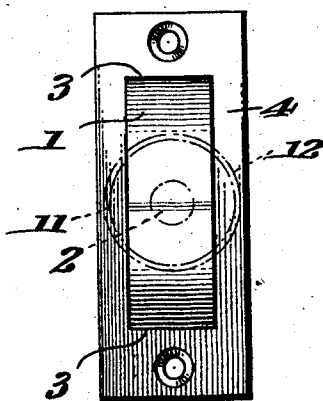
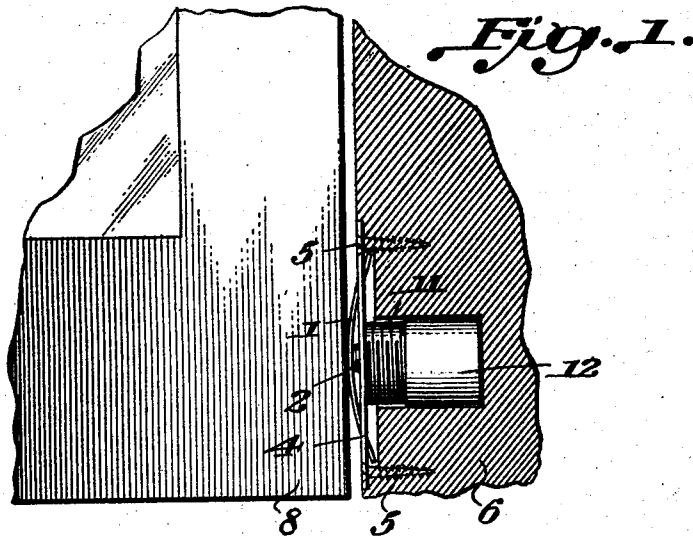
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ADJUSTABLE SASH HOLDER

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UNITED STATES PATENT OFFICE.

WILLIAM A. WOLFORD, OF ANSLEY, NEBRASKA.

ADJUSTABLE SASH HOLDER.

Application filed April 27, 1926. Serial No. 104,962.

The invention relates to an adjustable sash balance.

The object of the present invention is to provide a simple, practical and efficient device of strong, durable and comparatively inexpensive construction, designed to dispense with sash weights and spring balances and the structures incident to the same and capable of being applied to old as well as new windows without necessitating the removal of the window frame or casing and capable of enabling a sash to be readily raised and lowered and of yieldably holding the sash at any desired adjustment.

Another object of the invention is to provide a sash engaging device of this character adapted to eliminate all rattle of the sash and capable of adjustment for controlling the pressure against the sash so that when the device is installed the pressure may be adjusted to suit the weight of the sash whereby the same may be securely held at any adjustment and at the same time permitted to slide freely without the application of excessive force, in raising and lowering the sash.

With these and other objects in view, 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, it being understood that various changes in the form, proportion and minor details of constructions, within the scope of the claim, may be resorted to without departing from the spirit or sacrificing any of the advantages of the invention.

In the drawings:—

Figure 1 is a front elevation of an adjustable sash balance constructed in accordance with this invention.

Fig. 2 is a side elevation of the same.

Fig. 3 is a central vertical sectional view of a portion of a window showing the improved device applied thereto.

Fig. 4 is a detail perspective view of the plunger.

In the accompanying drawing in which is illustrated the preferred embodiment of the invention, 1 designates a spring strip adapted to be bowed by a spring pressed plunger 2 and having its ends arranged in upper and lower transverse slots or openings 3 in a supporting plate 4 which is secured by screws 5 or other suitable fastening de-

vices to the window frame or casing 6. The supporting plate which is oblong may be constructed of any suitable metal and it is let into the window frame in a suitable recess thereof and has its outer or front face flush with the recessed face of the window frame. The supporting plate is provided at its center midway between the upper and lower slots with an intermediate opening 7 through which the plunger 2 operates to bow the spring strip and force the same into engagement with the sash 8. The slots 3 are preferably rectangular and the intermediate opening is movably circular but the plunger may be of any desired configuration in cross section as will be readily understood.

The plunger 2 consists of a stem or body and a head 9 preferably consisting of a disk secured to the inner end of the plunger by reducing the inner end and riveting the same in a central opening of the head 9 as shown at 10 in the accompanying drawing but the head may be rigidly connected with the stem or body portion of the plunger in any other desired manner as will be readily understood. The plunger is contained within a tubular casing 11 consisting of an exteriorly threaded cylinder suitably secured to the supporting plate and having mounted on it an interiorly threaded cylindrical cap 12 which is adapted to be adjusted on the tubular casing to vary the tension of a coiled spring 13 which is interposed between the cap and the head of the plunger. The adjusting means consisting of the exteriorly threaded casing and the interiorly threaded cap control the tension of the spring 13 and regulate the pressure of the spring strip when against the sash. The spring strip 1 presents a smooth surface to the sash and will enable the sash to slide freely when the proper force is applied to the sash for raising and lowering the same and it will securely hold the sash in any adjustment. In practice the device is designed to be located at both sides of a window but any number of the devices may be employed and a single device may be used with light sashes where the pressure exerted by the same against the sash is ample for holding the sash in its adjustment. The device may be easily applied to a window without removing the frame or the sashes and it will obviate the necessity of providing pockets for sash weights.

What I claim is:

An adjustable spring balance comprising a supporting plate designed to be secured to a window frame, an exteriorly threaded
5 cylindrical casing carried by the supporting plate, the latter having upper and lower slots and provided with an intermediate opening disposed centrally of the casing, a
spring strip bridging said opening and
10 adapted to bear against the edge of the sash and having its ends arranged in the slots of the supporting plate, a plunger
free to slide through the intermediate open-

ing in the supporting plate and bearing against the spring strip intermediate 15 the ends of the strip to force the same into engagement with the sash, a coiled spring bearing against the inner end of the plunger for urging the plunger outwardly, and a
cap having screw threaded fit with the cas- 20 ing whereby to adjust the spring to vary the pressure against the sash.

In testimony whereof I have hereunto set my hand.

WILLIAM A. WOLFORD.