J. B. GLOWACKI.
RESILIENT POSITIONING DEVICE FOR WINDOWS.
APPLICATION FILED JULY 5, 1912.

1,065,234. Patented June 17, 1913.
2 SHEETS—SHEET 2.
To all whom it may concern:

Be it known that I, JOHN B. GLOWACKI, a citizen of the United States, and a resident of the city of Chicago, in the county of Cook and State of Illinois, have invented certain new and useful Improvements in Resilient Positioning Devices for Windows; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawings, and to the numbers of reference marked thereon, which form a part of this specification.

This invention relates to improvements in my prior application for patent for positioning devices for windows, Serial No. 639,990, filed Nov. 13, 1911.

This invention relates to resilient positioning devices for windows and more particularly to a device adapted to hold a window sash in adjusted position in its frame to prevent rattling.

It is an object of the invention to afford spring pressed friction rollers carried upon the sash and adapted to yieldingly bear against the jams in the sash of the window frame in which the sash is supported, said friction rollers serving to hold the sash at all times true in the frame and acting to permit raising and lowering of the sash in the usual manner when stress sufficient to overcome the frictional resistance against the jamb is applied thereto.

It is also an important object of this invention to provide a positioning device for windows having a fusible member connected therewith adapted to fuse when heat is applied thereto, and thereby release the positioning device to permit the window to frame in which the sash is supported, and which is attached to close automatically.

It is also an object of the invention to afford a spring construction whereby sufficient pressure is normally maintained against the friction members to hold the same with sufficient pressure against the jamb to balance the weight of the sash.

It is also an object of the invention to prevent rattling of the sash in the frame.

It is finally an important object of this invention to provide a positioning device adapted for general use in connection with slidable sash and of such strong and durable construction as to practically eliminate the cost of repair or renewal.

The invention in a preferred form is hereinafter more fully described.

In the drawings: Figure 1 is a front elevation, partly broken away, of a window frame and sash illustrating the application of the device embodying my invention. Fig. 2 is a view in elevation of the positioning device illustrated in Fig. 1. Fig. 3 is an enlarged fragmentary longitudinal section of a sash illustrating the assembling of the positioning device. Fig. 4 is an enlarged section taken on line 4—4 of Fig. 2. Fig. 5 is an enlarged fragmentary detail of one of the holding or friction members illustrating the manner in which the same is attached to the springs. Fig. 6 is a section taken on line 6—6 of Fig. 5. Fig. 7 is a view similar to Fig. 5 and illustrating a slightly modified construction of the holding member. Figs. 8 and 9 illustrate a slightly modified form of the wheel construction.

As shown in the drawings: 1, indicates the side rail of a sliding window sash and 2, indicates the jamb of the window frame. The sash of the frame may, of course, be constructed in the usual or any preferred manner. The side rail on each side of the sash is provided at its outer edge with a recess which may be constructed in any suitable manner by mortising or otherwise as shown in Fig. 1, in each side of the sash and near the middle of said stile or rail.

The positioning and holding device comprises a metallic back plate 3, adapted to fit closely in the recess in the sash, and affording upwardly and downwardly directed flanged attaching ends 4.

As shown clearly in Fig. 2, the strap curves slightly inward from said flanged attaching ends 4, and at a point on each side of the center of the same is bent outwardly to afford a raised portion 5.

6, indicates an apertured spacing member composed of relatively soft fusible metal and provided with flanged sides and ends, 7 and 8, respectively, adapted to rest upon the raised portion 5 of the strap 3.

9 indicates apertured webs, each of which is integral with the bottom and sides of the spacing member.
As shown in Fig. 3 a plurality of leaf springs 10, 11 and 12, having their upwardly and downwardly directed ends spring or curved outwardly, are firmly secured in position upon the fusible spacing member 6, and the raised portion 5 of the back plate by means of bolts 13, which extend through the same and a spacing plate 14. A fork or yoke 15, is rigidly secured to each of the outwardly curved ends of the spring 12, and a friction wheel, comprising a metallic or other suitable peripherally grooved body portion 16, having a resilient tire 17, thereon, is journaled in each of said yokes. The curvature of the leaf spring 12, at its end is such as to normally project said wheels into positive engagement with the jamb edge.

The construction illustrated in Fig. 7 is identical with that shown in Fig. 6, except that in lieu of the wheel 15, and friction member 17, a star wheel 18, is journaled in the yoke 13, the points or fingers thereof at all times affording independent bearings against the jamb, and acting bracingly to resist rotation, this resistance, of course, being greatly augmented by the tension of the leaf spring 12, which serves to hold the star wheel in firm engagement with the jamb.

Figs. 8 and 9 illustrate a modified wheel construction in which a relatively small body portion 19, is used and a large friction band 20, surrounds the same to afford a tread adapted to bear firmly against the jamb of the window or any other suitable guide.

The operation is as follows: After having firmly secured the device in its proper position in the recesses in each of the side rails of the lower sash, said lower sash may be raised and lowered at will and said friction rollers serve to hold the sash at all times true in the frame as well as prevent the rattling of the sash in said frame. The fusible member 6, which is interposed as a spacing member between the leaf springs and the raised portion 5, of the back plate 3, is of such a character that it will readily fuse, in the event of the breaking out of a fire near the same and will thereby release the pressure of the springs against the wheels which bear against the jambs 2, and permit the lower sash to slide to closed position, if open, and thereby exclude the draft from the room until it is desirable to open the same to fight the fire.

Of course, it is to be understood that my invention may be applied to ordinary wooden sash, or to metal sash and that the springs for engaging the friction members against the jamb may be of any suitable kind and that many other details of construction may be modified without departing from the principles of this invention. I therefore do not purpose limiting the patent to be granted on this application otherwise than necessitated by the prior art.

I claim as my invention:

1. A device of the class described an attaching plate bent outwardly at a point near its center to afford a raised portion thereof, oppositely directed leaf springs secured upon the raised portion of the attaching plate, friction rollers journaled on the free ends of one of said leaf springs and normally forced outwardly by the same, and a fusible member positioned intermediate the attaching plate and the leaf springs.

2. A device of the class described embracing a back plate adapted to fit closely in a recess in the side rail of a sash and having a raised portion at a point near the center of the same, a fusible member, a plurality of leaf springs, friction rollers journaled thereon and forced outwardly thereby, a spacing member, and bolts extending through said spacing member, leaf springs, fusible member and attaching plate to securely bind the same together to afford a rigid construction.

3. A device of the class described embracing a back plate adapted to fit closely in a recess in the side rail of a sash and having a raised portion at a point near the center of the same, a fusible member, a leaf spring, friction rollers journaled thereon and forced outwardly thereby, and means rigidly securing said leaf spring, fusible member and attaching plate together.

4. A device of the class described embracing a back plate, having a raised portion at a point near the center of the same, a fusible member, a plurality of leaf springs, friction rollers journaled thereon and forced outwardly thereby, a spacing member, and means rigidly securing said spacing member, leaf springs, fusible member and attaching plate together.

5. A device of the class described embracing a back plate, having a raised portion at a point near the center of the same, a plurality of leaf springs, a fusible spacing member disposed between the same and said raised portion, friction rollers journaled thereon and forced outwardly thereby, a spacing plate, and bolts extending through said spacing plate, leaf springs, fusible spacing member and attaching plate and binding the same together to afford a rigid construction.

In testimony whereof I have hereunto subscribed my name in the presence of two subscribing witnesses.

JOHN B. GLOWACKI.

Witnesses:

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GEORGE R. MOORE.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D.C."