July 17, 1923. 1,462,235

O. A. LAWRENCE

WINDOW SPRING

Original Filed Dec. 2, 1920

Fig. 1.

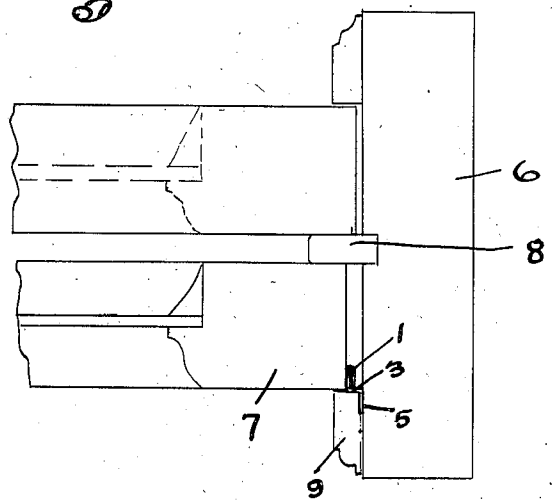


Fig. 2.

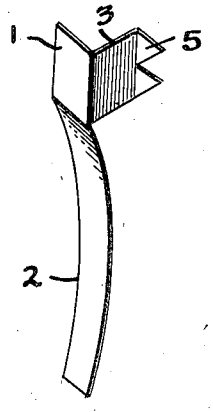
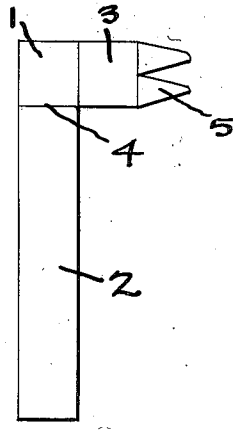


Fig. 3.



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UNITED STATES PATENT OFFICE.

OSCAR A. LAWRENCE, OF SAN FRANCISCO, CALIFORNIA, ASSIGNOR TO URBAN H. ROBERTS, OF SAN FRANCISCO, CALIFORNIA.

WINDOW SPRING.

Application filed December 2, 1920, Serial No. 427,724. Renewed April 18, 1923.

To all whom it may concern:

Be it known that I, OSCAR A. LAWRENCE, a citizen of the United States, and a resident of the city and county of San Francisco, State of California, have made a new and useful invention—to wit, Improvements in Window Springs; and I do hereby declare the following to be a full, clear, concise, and exact description of the same.

This invention relates particularly to a window spring designed and adapted to prevent the movement of the window sash laterally in its guide frame with the consequential elimination of noise and rattling but to not offer any impedence to the upward or downward movement of the window.

A further object is to provide a device of this character that is simple in construction, capable of being manufactured cheaply in large quantities and quickly and easily applied to a window sash structure. Other objects and advantages will appear as this specification progresses.

In this specification and the annexed drawings, the invention is illustrated in the form considered to be the best, but it is to be understood that the invention is not limited to such form, because it may be embodied in other forms, and it is also to be understood that in and by the claims following the description, it is desired to cover the invention in whatsoever form it may be embodied.

In the accompanying one-sheet of drawings,

Figure 1 represents a plan section through a window sash casing having my invention applied thereto.

Figure 2 represents an enlarged perspective view of a window spring constructed in accordance with my invention.

Figure 3 represents a plan view of the window spring blank.

In detail the structure illustrated in the drawings comprises a strip of material, preferably light sheet metal having a head portion 1 thereon, a depending section 2 and a laterally projecting portion 3 formed adjacent the head 1. The head member 1 is apportioned from the body member 2 on the crease line 4, the said depending section 2 being bended on an arcuate contour with respect to the plane of said head.

The lateral projection 3 on the head portion 1 is bended at right angles thereto and has the terminus thereof provided with a serrated end as indicated at 5, rebended at right angles to the last mentioned section so as to lie substantially parallel with the plane of the head portion 1. The pointed ends 5 of the lateral projection 3 are of sufficient length to be driven into a window casing for positioning the spring thereon but without forming too great a resistance for withdrawal.

Figure 1 illustrates the application of a window spring of the anti-rattling type to the sash casing, the said casing being designated by the numeral 6, the side of the window sash by the numeral 7, the central vertical stop by the numeral 8 and the guide batten by the numeral 9. In the majority of windows, space remains between the contacting surfaces of the window sash and casing for the purpose of free vertical movement of the said sash. During windy periods, the force thereof strikes the window sash resulting in the lateral and edgewise movement thereof in its guide frame. Applicant proposes to do away with the free movement of the sash by interposing the window spring between the said sash and the casing by inserting the serrated end 5 between the batten 9 and casing 6 and permitting the shoulder portion 3 thereof to lie parallel with the vertical edge of the batten 9, thus placing the bow-shaped or arcuate arm 2 in the space between sash edge and casing. The depth of the bow is preferably made the equivalent of the largest space that would ordinarily be found between the sash edge and casing so that where this space diminishes, the depth of the bow would likewise decrease or assume a more straightened position. The diminishing or increasing of the depth of the bow by the edgewise movement of the sash comprises the cause and effect for either making or preventing the noise of window rattling.

Having thus described this invention, what I claim and desire to secure by Letters Patent is:

1. A device such as described comprising a strip of metal with a head portion thereon and an end portion formed in an arcuate contour; said head portion having a lateral projection adjacent the end thereof, bent at

right angles thereto and terminating with an end rebended on a plane substantially parallel with that of the head portion.

2. A device such as described comprising a strip of metal with a head portion thereon and an end portion formed in an arcuate contour; said head portion having a lateral projection adjacent the end thereof, bent at right angles thereto and terminating with an end rebended on a plane substantially parallel with that of the head portion, and having the end of said lateral projection serrated.

In testimony whereof, I have hereunto set my hand at San Francisco, California, this 26th day of November, 1920.

OSCAR A. LAWRENCE.

In presence of—
LINCOLN V. JOHNSON.