C. W. LANE.
ANTHRATTLER FOR WINDOW SASHES.
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Witness

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By

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To all whom it may concern:

Be it known that I, CHARLES W. LANE, a citizen of the United States, residing at Atlanta, in the county of Fulton and State of Georgia, have invented new and useful Improvements in Antirattlers for Window-Sashes, of which the following is a specification.

This invention relates to anti-rattlers for windows and the like, and the main object of the invention is to provide a simple and efficient device that may be readily applied to a window sash and frame and embodying coacting wedge components, one of which is rigid on the sash and the other yielding in its mounting on the frame to position relatively to the rigid component and positively hold the sash against movement in the frame.

A further object of the invention is to provide an anti-rattler for windows comprising components that will not stick or in the least interfere with the raising and lowering of the sash, and having a self-acting engagement to bind the sash against movement when the sash is closed.

With these and other objects and advantages in view, the invention consists of the construction and arrangement of the several parts which will be more fully hereinafter described and claimed.

In the drawing:

Figure 1 is a transverse vertical section of portions of a window frame and sash showing the improved anti-rattler components applied thereto and illustrated in elevation, the components being partially engaged.

Fig. 2 illustrates the components of the improved anti-rattler in enlarged elevation partially engaged and looking toward the side opposite that shown by Fig. 1.

Fig. 3 is a view similar to Fig. 2 showing the anti-rattler components fully engaged.

Fig. 4 is a horizontal section taken in the plane of the line 4-4, Fig. 3.

Figs. 5 and 6 are detail edge elevations of the anti-rattler components.

The improved anti-rattler comprises a rigidly mounted component 5 which is secured to the sash 6, and a sliding and yieldingly mounted component 7 held in a casing 8 secured to the window frame 9, the component or slide 7 being in registering engaging position relatively to the component 5. The components 5 and 7 are substantially wedge-shaped and respectively have reversely inclined engaging edges 10 and 11, the edge 10 of the component 5 sliding over the edge 11 of the component 7 during the upward and downward movement of the sash 6 to which the said component 5 is rigidly secured.

The component 5 has upper and lower apertured end ears 12 to receive securing fastenings, and the widest portion of said component is disposed uppermost. The casing 8 is of box-like form and is provided with a chamber 13 and an edge slot 14 opening into said chamber, the component 7 being movable in said chamber and in part outwardly and inwardly through the slot 14. The width of the slot 14 is slightly greater than the thickness of the component 7, so that said component will be free to move in the slot but prevented from having lateral loose play to insure full registration of the inclined edge 11 thereof with the inclined edge 10 of the component 5. A bowed spring 15 is secured at its center to the back walls of the chamber 13 and has its free ends in continual engagement with the rear edge of the sliding component 7 and operating to normally force the greater portion of said component outwardly from the casing 8 through the slot 14. The outward movement of the component 7 is limited by two studs 16 secured thereto and engaging the front wall of the chamber 13 when the said component is fully projected, all as clearly shown by Figs. 2, 3 and 4. This spring also insures an equal projection of the inclined edge 10 out of the casing 8 and thereby always disposes the edge 11 thereof for full engagement with the edge 10 of the component 5. The casing 8 has apertured ears 17 and 18 at the ends and rear edge to receive fastenings for securing the same to the window frame.

The components of the anti-rattler may be applied at any elevation in relative positions on the frame and sash. As shown, the component 7 is located near the bottom of the sash 6 and is fastened to one of the side rails, and the casing 8 and component 7 are secured to the inner portion of one side of the frame 9 near the sill of the latter.

When the sash 6 is raised the edge 10 of the component 5 gradually slides off the
edge 11 of the component 7 as shown in full and dotted lines in Fig. 1, and after the component 7 is cleared the spring 15 projects it the full predetermined distance.

When the sash is lowered, the lower portion of the edge 10 of the component 5 first strikes the upper portion of the edge 11 of the component 7, and a continuation of the downward movement of the sash causes the said component 7 to gradually recede into the casing 8 against the resistance of the spring 15, the two edges 10 and 11 of the components being in positive contact and the component 7 in maximum receded position when the sash 6 is fully lowered.

Among other advantages of the improved anti-rattler is the provision of the two comparatively long edges 10 and 11 of the respective components 5 and 7 and the yielding operation of the one component whereby an easy engagement and disengagement ensues without detracting from a positive holding of the sash in anti-rattler relation to the window frame. Also, the parts or components of the anti-rattler have a self-cooperation without requiring attention from the operator. The wedge 10 of the component 5, as shown in Fig. 6, is wider than the edge 11 of the component 7 to always insure contact and positive engagement of the two edges and a consequent regular movement of the said component 7 in its casing due to the full engagement of both edges.

All the parts of the improved anti-rattler will be formed of suitable metal that may be treated or plated to render the same non-corrosive, and changes in the dimensions and proportions of the parts will be made to adapt the anti-rattler to various sizes of sash and window frame structures.

What is claimed is:

1. The combination with a window frame and sash, of an anti-rattler consisting of a wedge component longitudinally disposed on and fixed to one side rail of the sash and having its inner edge inclined, an immovable chambered casing secured to one side of the frame and having a slot in its outer edge adjacent to the sash, a wedge component held in the casing and movable equally its full length through the slot of the casing and provided with means for limiting its movement outwardly from the casing, the movable wedge component held by the casing having its rear edge inclined reversely to and shorter than the edge of said fixed component with which it engages, and a spring within the casing engaging the outer edge of the said movable component.

2. The combination with a window frame and sash, of an anti-rattler, consisting of a wedge component longitudinally disposed on and fixed to one side rail of the sash and having its inner free edge inclined, an immovable chambered casing secured to one side of the frame and having a slot in its rear edge, a wedge component held in the casing and having a restricted movement equally its full length through the slot of said casing, the rear free edge of the wedge component held by the casing being inclined reversely to and shorter than the inclined edge of the component on the sash with which it engages, and a spring immediately secured in the chamber of the casing and having its free ends bearing on the outer edge of the casing component adjacent to the ends of said component to exert an equal spring pressure on the latter.

In testimony whereof I have hereunto set my hand in presence of two subscribing witnesses.

CHARLES W. LANE.

Witnesses:
A. R. HIRSOWITZ,
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