

(No Model.)

S. R. KIRBY.

WINDOW PACKING AND ANTIRATTLING DEVICE.

No. 505,315.

Patented Sept. 19, 1893.

Fig. 1

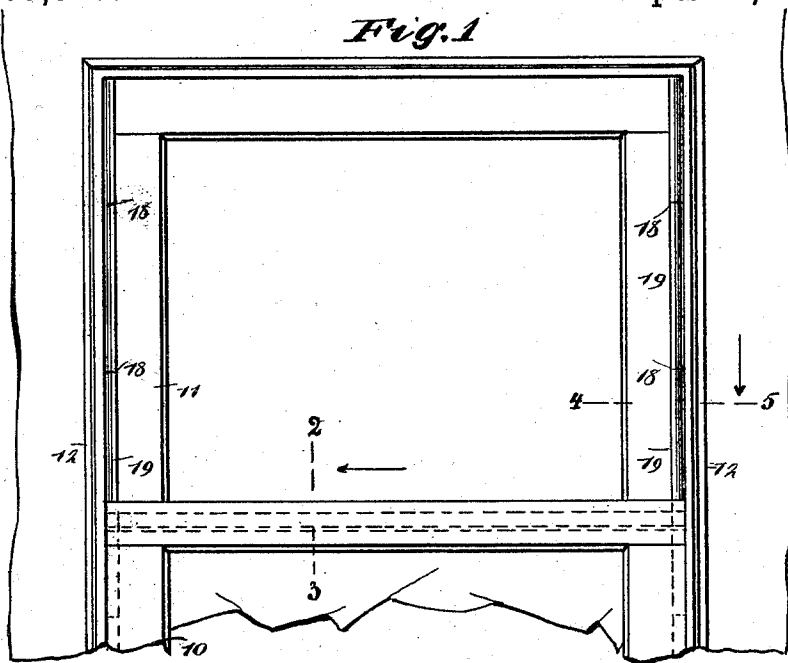


Fig. 2

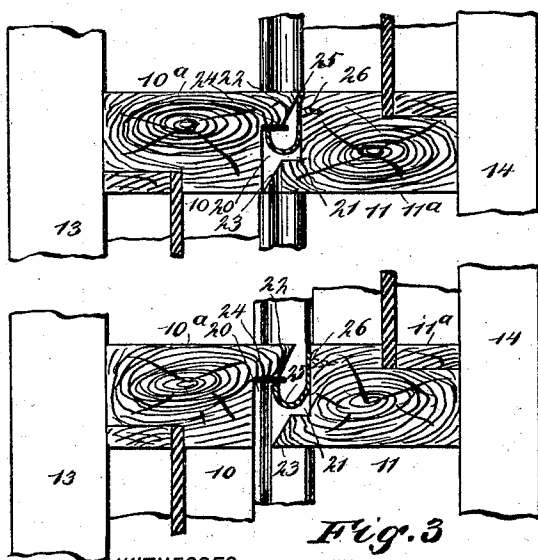


Fig. 4

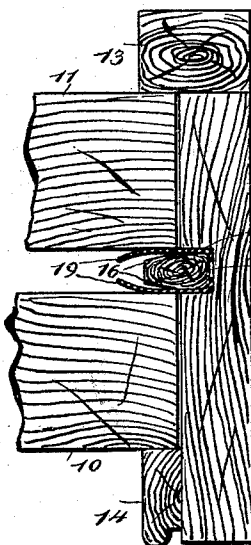


Fig. 5

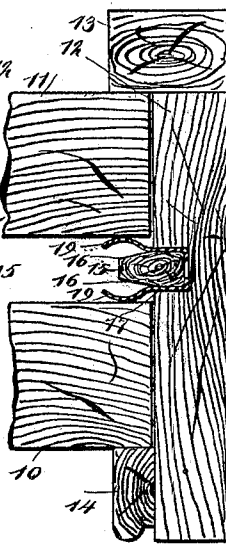


Fig. 3

WITNESSES:

J. A. Bugthorn
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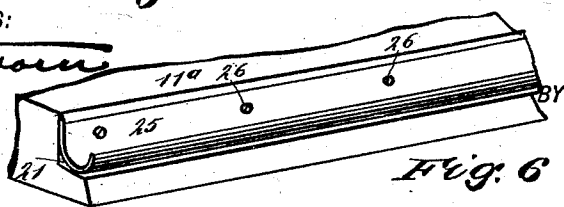


Fig. 6

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WINDOW PACKING AND ANTI-RATTLING DEVICE.

SPECIFICATION forming part of Letters Patent No. 505,315, dated September 19, 1893.

Application filed February 18, 1893. Serial No. 462,855. (No model.)

To all whom it may concern:

Be it known that I, STEPHEN R. KIRBY, of New York city, in the county and State of New York, have invented a new and Improved Window Packing and Anti-Rattling Device, of which the following is a full, clear, and exact description.

My invention relates to improvements in that class of devices which are used to prevent window sashes from rattling, and to seal them tightly so as to prevent the passage of air around them, and the object of my invention is to produce an extremely simple device of this class which may be cheaply and easily applied to any ordinary window, whether new or old, which will make an air tight seal around the sashes of a window, will hold the sashes in such a way as to take up lost motion and prevent rattling, and which can be adjusted readily to suit different windows, that is, applied to sashes having different degrees of looseness.

To these ends, my invention consists in certain features of construction and combinations of parts, which will be hereinafter described and claimed.

Reference is to be had to the accompanying drawings forming a part of this specification, in which similar figures of reference indicate corresponding parts in all the views.

Figure 1 is a broken elevation of a window provided with my improved anti-rattler and packing device. Fig. 2 is a detail cross section through the meeting sash rails, on the line 2—3 in Fig. 1, showing the device as applied to the rails, and with the rails fitting tightly. Fig. 3 is a similar section, but showing the rails separated or fitting loosely. Fig. 4 is a detail cross section on the line 4—5, in Fig. 1, showing the packing as arranged on the stop bead and between sashes which fit relatively close. Fig. 5 is a similar section showing the arrangement of the device where the sashes fit loosely. Fig. 6 is a broken perspective view of the middle sash rail to which the packing is applied.

The lower and upper sashes 10 and 11 slide in the usual way in the window frame 12, and between the outer and inner strips 13 and 14. They are separated by the usual parting strip or bead 15, but the bead is beveled near its outer edge and on opposite sides, as shown

at 16, to provide for the movement of the metallic packing and anti-rattler 17. This metallic packing is of a general U-shape when viewed in cross section, as in Figs. 4 and 5, and it is adapted to extend the entire length of the parting bead, being made up in short sections, as shown by the joints 18, in Fig. 1, as by making it in sections it may be more readily shaped so as to take up the slackness of the sashes. The opposite members 19 of the packing extend inward beyond the inner edge of the bead strip or parting strip 15, and the members are made of spring metal so as to press closely against the sashes, and at their inner or free ends the members converge to prevent them from scratching the sashes. If the sashes fit quite snugly, the members 19 are shaped so as to gradually converge toward their free ends, but if the sashes are somewhat loose, the members are bent outward, as shown in Fig. 5, so that their outer portions will press against the sashes. It will be seen that the members, being flexible, will fit snugly and yet permit the easy movement of the sashes, and will also make an air tight seal and prevent the sashes from rattling. The metal of the packing should be sufficiently stiff to hold the sashes in place, but not so stiff as to prevent them from sliding easily.

For packing the joint between the meeting rails 10^a and 11^a of the sashes, a modification of the packing is used, and the packing is applied to the edges of the rails. To this end, the rail 10^a is recessed on its inner edge, as shown at 20, the rail 11^a is recessed as shown at 21, and the upper portion of the inner edge of the rail 10^a is inclined, as shown at 22, while the lower portion of the inner edge of the rail 11^a is inclined as shown at 23. In the upper portion of the recess 20 a gasket 24 is fastened, and in the recess 21 of the rail 11^a is secured a flexible metallic strip 25, which is of a general U-shape in cross section, the strip being extended longitudinally of the rail and fastened by screws 26, or equivalent fastenings. The free edge of the packing strip will thus extend beneath the gasket 24, so that when the rails are closed, the packing strip will fit closely against the gasket and effect an air tight joint.

From the foregoing description it will be

seen that the window is packed tightly all around, and that the devices described absolutely prevent rattling, while such devices are extremely cheap and may be easily applied.

- 5 To apply the packing strips 17 to an old window, it is only necessary to reduce the parting bead 15 somewhat, so that the strip may be placed in the groove of the bead, and the bead then inserted between the members
10 of the strip, as shown in Figs. 4 and 5.

Having thus described my invention, I claim as new and desire to secure by Letters Patent—

1. The combination with the window frame, the sliding sashes therein, and a parting strip, of a metallic packing, U-shaped in cross section, the same receiving the parting strip, the U-bend thereof being at the back of the strip and its arms extending beyond the strip at

each side, the extreme free ends of the arms 20 inclining toward each other, substantially as described.

2. The combination, of the sliding sashes having opposite meeting rails with longitudinal and opposite recesses therein, a packing 25 gasket secured to the upper wall of the recess in one rail, and a flexible metallic packing strip of U-shaped cross section secured at one edge in the recess of the opposite rail and having its free edge adapted to engage the gasket, 30 the said free edge of the U-shaped packing strip projecting outwardly at a point above the bottom wall of the recess in which it is secured substantially as described.

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Witnesses:

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ROBERT HUMPHREY.