

933,425.

Fig. 1.

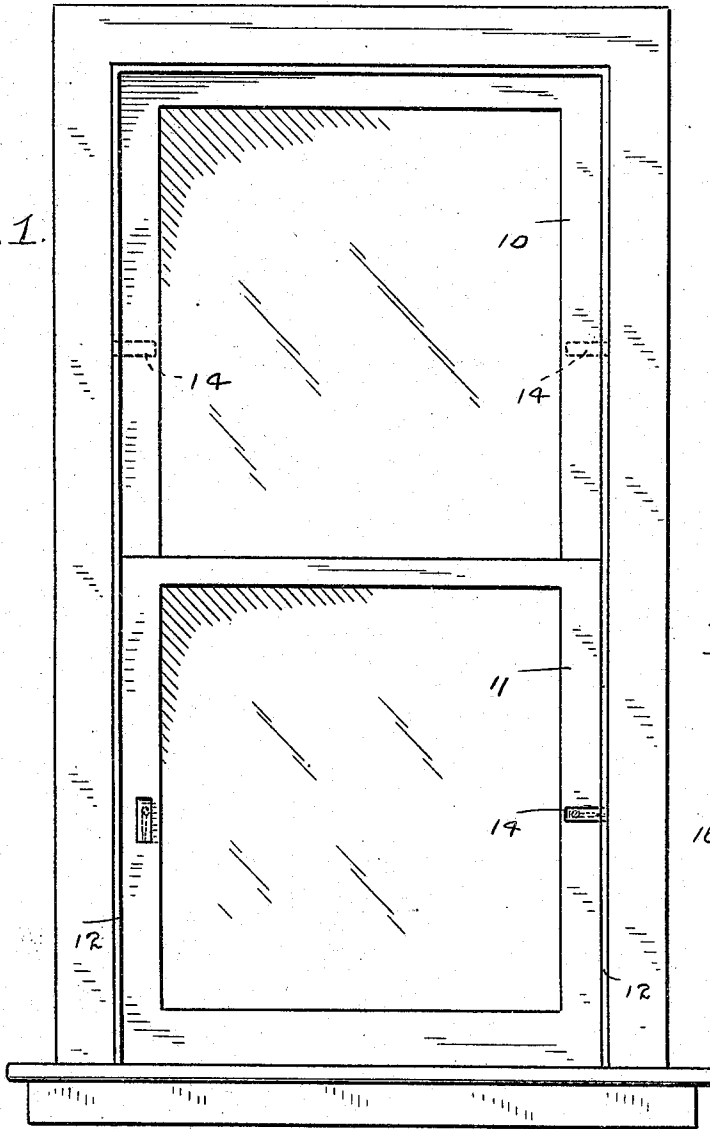


Fig. 4.

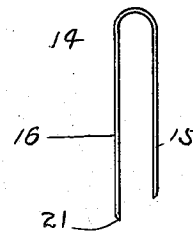
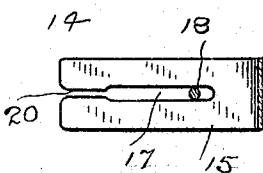
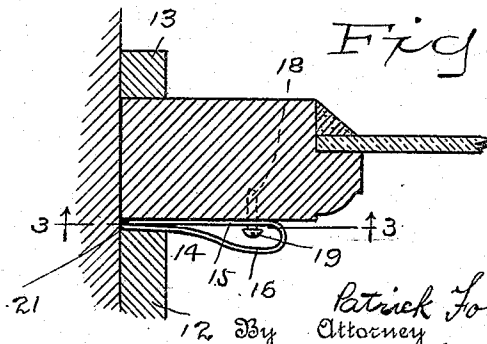


Fig. 3.



Witnesses:
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Fig. 2.



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UNITED STATES PATENT OFFICE.

PATRICK FORESTELLE, OF BRIDGEPORT, CONNECTICUT.

WINDOW-SASH TIGHTENER.

933,425.

Specification of Letters Patent.

Patented Sept. 7, 1909.

Application filed November 2, 1908. Serial No. 460,638.

To all whom it may concern:

Be it known that I, PATRICK FORESTELLE, a citizen of the United States, residing at Bridgeport, county of Fairfield, State of Connecticut, have invented a new and useful Window-Sash Tightener, of which the following is a specification.

This invention relates to the class of anti-rattling devices which are adapted to be used in connection with windows to stop rattling of the sashes and also to prevent the entrance of cold air, and the invention has for its object to provide a device of this character adapted for attachment to the side rails of window sashes, which shall be so simple and inexpensive to produce that it may be sold at retail for a few cents, which may be attached in place by a single nail or screw so that anyone can apply it without the use of other tools than a light hammer or a screw driver, which shall normally remain in place upon the side rail of the sash but will be wholly out of the way when not in use and adapted to be readily detached for cleaning the window or for painting without removing the nail or screw and which in the operative position will hold the sash firmly, preventing rattling and shutting out cold air, and will drop to the inoperative position without touching the fastener itself when the window is raised or lowered, as may be.

With these objects in view I have devised the simple and novel window sash tightener which I will now describe, referring to the accompanying drawing forming a part of this specification and using reference characters to indicate the several parts.

Figure 1 is an elevation of a window including upper and lower sashes and the casing; Fig. 2 a section on an enlarged scale of one side rail of a lower sash, the casing, the inner bead and the parting bead, showing the fastener in the operative position; Fig. 3 a section of the fastener on the line 3-3 in Fig. 2, looking in the direction of the arrows; and Fig. 4 is an edge view of the fastener detached.

10 denotes the upper sash of a window, 11 the lower sash, 12 the inner bead, 13 the parting bead and 14 my novel fastener as a whole. These fasteners are formed from strips of spring metal bent to approximately U-shape and comprise an inner arm 15 and an outer spring arm indicated by 16. The inner arm is provided with a slot 17 through

which a nail or screw 18 passes, the head of the nail or screw, indicated by 19, lying in the attached position close to the outer face of the inner arm but permitting the arm to slide freely. At the outer end of slot 17 is a neck 20, of less width than the slot so that the fastener is retained in place on the nail or screw until power is applied to remove it. The free end of both arms are preferably chamfered off and the outer or spring arm made slightly longer than the inner arm, although this is not essential, the end, specifically indicated by 21, of the outer arm overlapping the inner arm for convenience in insertion when the outer arm is pressed inward. In the inoperative position, the fastener drops down and hangs upon the nail or screw, as shown at the left side of the lower sash in Fig. 1, outer arm 16 springing away from the inner arm more or less as in Fig. 4.

In use, one fastener is quite sufficient upon each side rail of a sash. By placing the fasteners upon the outer side of the upper sash, as indicated by dotted lines in Fig. 1, and upon the inner side of the lower sash, both sashes are forced against the parting bead and the meeting rails are held tightly together thus preventing the entrance of cold air. In attaching the fasteners, a nail or screw for each fastener is driven into the side rail leaving sufficient space between the under side of the head and the rail for the fastener to move freely. The fasteners are inserted to place by forcing neck 20 over the nail or screw, the walls of the neck yielding outward sufficiently to permit the nail or screw to pass into the slot. The fastener on the left side of the lower sash in Fig. 1 is in the inoperative position and the one on the right side in the operative position. To place a fastener in operative position, the operator first draws it outward away from the casing into the horizontal position, then presses the outer arm inward, the end lying in contact with and if made longer covering the end of the inner arm, and then presses the ends of the two arms forward between the side rail of the sash and the inner bead as at the right in Fig. 1. The instant the operator removes his hand, the resiliency of the outer arm will force the sash inward against the parting bead and effectually stop rattling and shut out cold air.

An important feature of my novel fastener is that it is not necessary to withdraw the

fasteners in order to raise the sash. The power of the spring arms, the ends of which constitute an expansion end of the device to fit between the side rail of the sash and the inner bead, as above stated, while ample to prevent rattling and to retain the sashes against the parting bead, is not sufficient to lock the sash. When the sash is raised, the fasteners will be drawn out from between the side rails and the inner beads and will drop to the inoperative position as at the left of the lower sash in Fig. 1. The same result follows when the upper sash is moved downward.

Having thus described my invention, I claim:

1. The combination with a window sash, of an anti-rattling device directly pivoted to the sash and having an expansion end

formed to enter between the side rail of the sash and an adjacent bead, said device being movable in the direction of its length relatively to its pivot.

2. A device of the character described formed from a strip of sheet metal bent to approximately U-shape and comprising an inner arm and an outer spring arm, the inner arm being provided with a slot to receive a screw and the outer arm acting when the free ends of said arms are passed between the side rail of a sash and the bead to force the sash inward and prevent rattling.

In testimony whereof I affix my signature, in presence of two witnesses.

PATRICK FORESTELLE.

Witnesses:

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