

(No Model.)

J. H. M. BEATY.
DUST PROOF SASH FRAME.

No. 498,225.

Patented May 30, 1893.

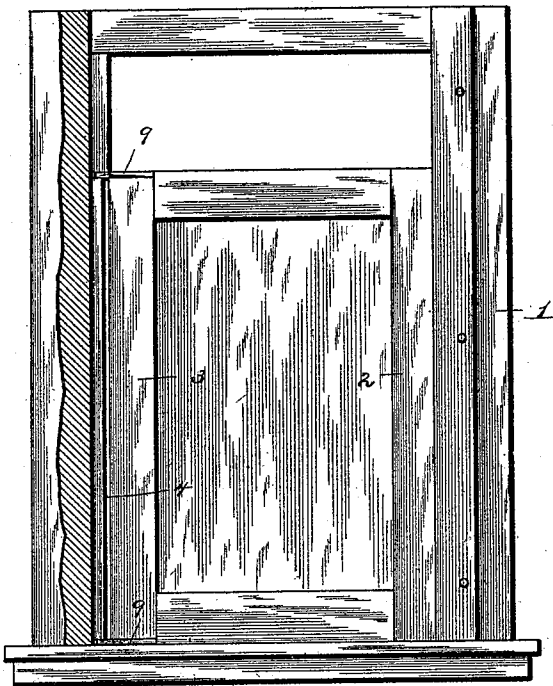


FIG. 2.

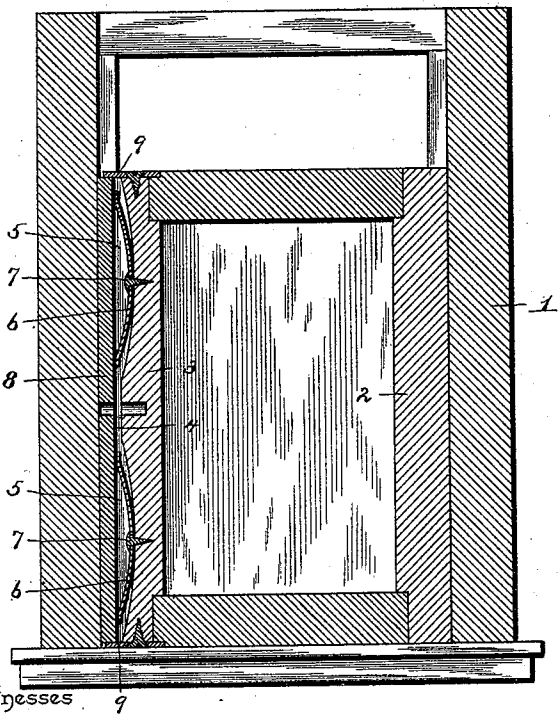
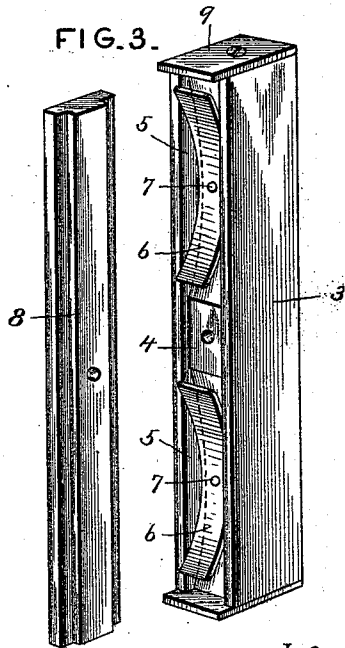


FIG. 3.



Witnesses

Harry L. Ames.

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By his Attorneys,

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Inventor

UNITED STATES PATENT OFFICE.

J. H. M. BEATY, OF COLUMBIA, SOUTH CAROLINA.

DUST-PROOF SASH-FRAME.

SPECIFICATION forming part of Letters Patent No. 498,225, dated May 30, 1893.

Application filed January 26, 1893. Serial No. 459,799. (No model.)

To all whom it may concern:

Be it known that I, J. H. MEANS BEATY, a citizen of the United States, residing at Columbia, in the county of Richland and State of South Carolina, have invented a new and useful Dust-Proof Sash-Frame, of which the following is a specification.

This invention relates to sash-frames, and has for its object to provide an anti-rattling and anti-frictional dustproof sash-frame that will accommodate itself automatically to the difference in size of the sash-frame produced by the swelling or contraction thereof; the parts thereof being simple and effective in their operation and readily understood, and with this object in view the invention consists of the construction and arrangement of the parts as will be more fully hereinafter described and claimed.

In the drawings: Figure 1 is an elevation of a window and sash-frame, a portion of the window-frame being broken away, and showing the improved construction in connection with the sash-frame. Fig. 2 is a longitudinal vertical section through the center of the parts shown by Fig. 1. Fig. 3 is a detail perspective view of the side rail of the sash-frame and the friction-bar of the improved construction shown disconnected from each other.

Similar numerals of reference indicate corresponding parts in the several figures of the drawings.

Referring to the drawings, the numeral 1 designates a window-frame, which may be located in the side of a car or in any other desired position, and wherein is mounted a sash-frame 2, having its left-hand vertical side-rail 3 formed with a recess 4 in its outer edge that has recesses 5 of greater depth extending inward to the said rail, nearer the upper and lower ends thereof, and wherein are seated crescent-shaped springs 6, that are held in position by single centrally-located dowel pins or rivets 7, and the free ends of the said springs normally stand outward beyond the plane of the termination of the said side-rail. If desired, however, these springs may be replaced by any well known mechanical equivalent, and thereagainst is loosely held a cushion strip or frictional bar 8, of the same thickness as the rail 3, and substantially of T-

shaped form so that it may be pressed inward into the recess 4, against the action of the springs 6, that tend to force the said strip or bar outward. The said strip or bar is unconnected at any point and is held in position by metallic plates 9, secured to the upper and lower ends of the said rail 3, and projecting outward beyond the edge of the said rail, and against which the opposite ends of the said strip or bar are adapted to engage to hold the latter against vertical movement and away from its proper position relatively to the rail 3. By this means it will be seen that a fastening for the said strip or bar becomes unnecessary and that the mounting of said parts is simplified with the same relative amount of efficiency of operation.

The springs 6 operate against the cushion strip or frictional bar 8, keeping the latter up against the window-frame at all times. When the sash-frame swells it cannot bind between the window-frame, for there is a small space allowed between the sash-frame and the said cushion strip. The swelling of the sash-frame partially closes this small space and forces the springs backward into their recesses, and by this means it will be seen that an anti-friction sash-frame is provided. When the sash-frame shrinks, the springs force the cushion strip outwardly and hold it in contact with the window-frame, thereby forming an anti-rattling sash-frame. By keeping the sash-frame closely fitted to the window-frame in the manner set forth, and allowing no crack or crevice whatever, it will be seen that all air and dust are excluded.

It will be understood that the cushion strip has just enough play longitudinally between the metal plates 9 to permit the springs to adjust the same outwardly and obviate lost motion when the sash-frame is raised or lowered.

The improved attachment is adapted to be placed on the left side of the sash-frame, and therefore does not interfere with any catches used on the window-frame and adapted to engage the sash-frame. Further, the width of the cushion strip, together with the width of the rail 3 to which it is applied, are just equal to the width of the solid rail on the opposite side of the sash-frame.

A further advantage of the improvement is

that the cushion strip is quite narrow, and by this means all the working parts are hidden behind the window-stop, giving the appearance, outwardly, of a solid sash-frame.

5 It will be understood that the sash-frame may be of any size or relative shape so long as it is applicable to receive the improved attachment, and may be cheaply manufactured and applied.

10 Having described the invention, what is claimed as new is—

In combination with a window-frame, of a sash-frame having one of the rails thereof formed with a recess in the edge thereof from
15 which deeper recesses extend inward near the

ends thereof, springs mounted in said deeper recesses, a T-shaped cushion strip loosely bearing against said springs and unconnected, and metallic plates located at the upper and lower ends of the said recessed rail and projecting 20 beyond the edge thereof to confine the said cushion strip between the same in a loose manner, substantially as described.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in 25 the presence of two witnesses.

J. H. M. BEATY.

Witnesses:

HERBERT CAUTHEN,
D. E. McDOWELL.