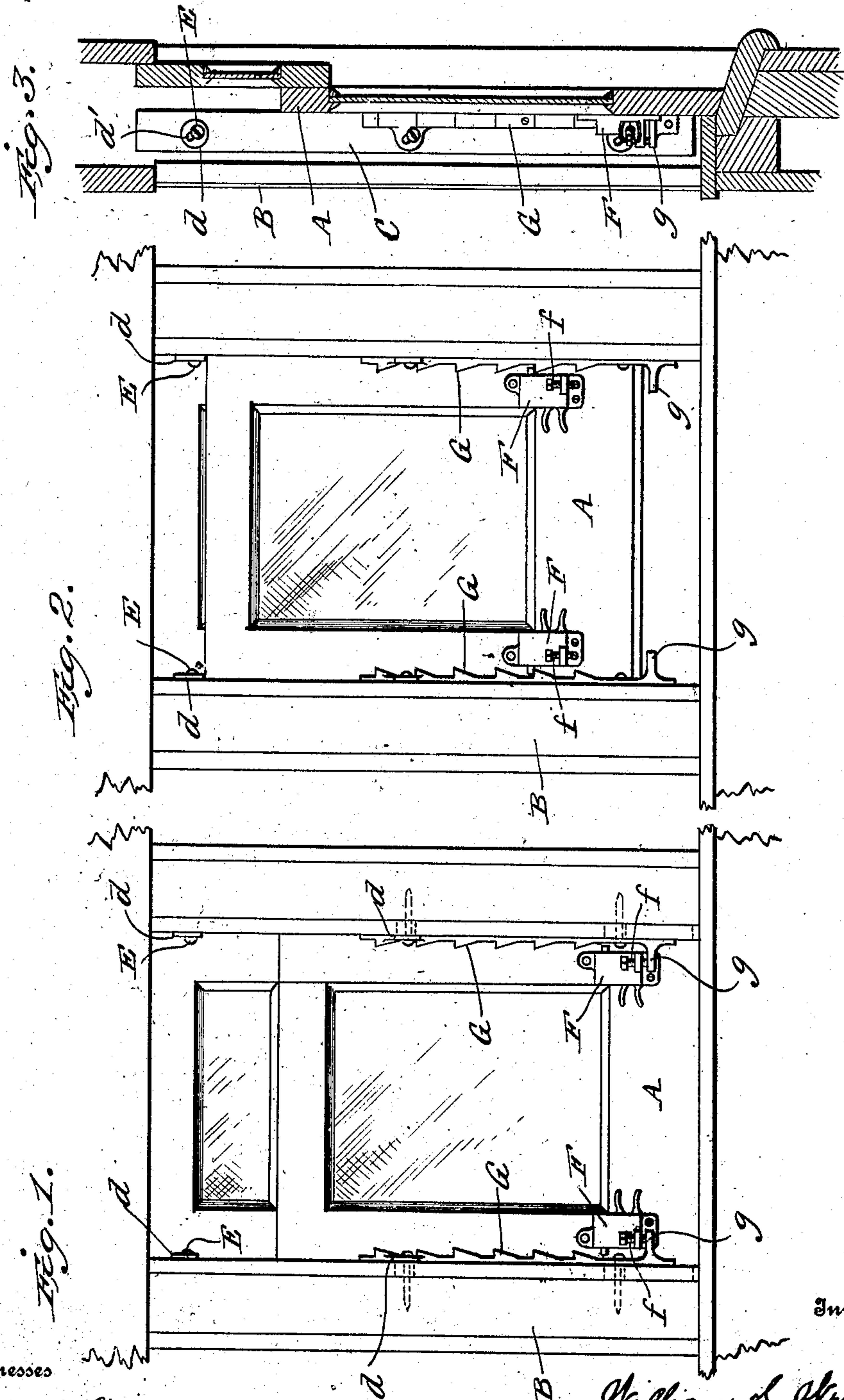


W. S. WRIGHT.
 MEANS FOR HOLDING WINDOW SASH.
 APPLICATION FILED JULY 29, 1908.

911,690.

Patented Feb. 9, 1909.



Witnesses

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UNITED STATES PATENT OFFICE.

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MEANS FOR HOLDING WINDOW-SASH.

No. 911,690.

Specification of Letters Patent.

Patented Feb. 9, 1909.

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To all whom it may concern:

Be it known that I, WILLIAM S. WRIGHT, a citizen of the United States, residing at Newark, Licking county, Ohio, have invented certain new and useful Improvements in Means for Holding Window-Sash; and I do hereby declare the following to be a full, clear, and exact description of the same, reference being had to the accompanying drawings, forming a part of this specification, and to the figures and letters of reference marked thereon.

This invention relates to improvements in window construction and is designed particularly to provide a means whereby the window sash may be held firmly between its guides when in adjusted position so as to prevent rattling, or, under certain circumstances, to prevent the entry of air, etc. around the sash.

While the invention is particularly adapted for use in connection with car windows, it may be advantageously used for holding the windows of buildings or apartments of any character.

In windows of ordinary construction the sash moves between rigid guides extending vertically along each edge of the sash, and sufficient play must be allowed to permit of the sash being moved freely into either its open or closed position, but in accordance with the present invention while the same freedom of sash movement is provided for, a holding strip or bead which may constitute one of the side guides, is mounted on the casing so as to be movable toward and from the sash, preferably, in a diagonal plane, and connections are provided whereby the weight of the sash is supported wholly or partly on the movable bead or strip, and whereby the strip is caused to advance toward and against the sash for holding the same against transverse movement.

In the accompanying drawings: Figure 1 is an elevation of a window sash and of so much of the casing as is necessary for a clear understanding of the present invention. Fig. 2 is a similar view with the sash partly raised. Fig. 3 is a section taken on a vertical plane transversely of the sash.

Similar letters of reference indicate the same parts in all the views.

The sash A and casing B are both illustrated as of conventional form, inasmuch as they may be of ordinary or any preferred construction.

In accordance with the present invention, beads or strips C, which may conveniently constitute the inner walls of the side guides for the sash, are mounted on the casing, so as to move toward and from the sash in a downwardly inclined plane. As shown, the said beads or strips are provided with metal fixtures, indicated at *d*, having diagonal slots *d'* therein through which screws or equivalent fasteners are passed into the casing or frame. The metallic fixtures *d* and screws *E* constitute guides for the beads or strips, and it will be readily understood that when in elevated position the guides or strips will be moved away from the sash and the latter is free for vertical adjustment, but when said strips are moved downwardly they will advance toward the sash, thereby not only binding the sash tightly so as to prevent rattling, but will also prevent passage of the air around the edges of the sash.

In order to make the movements of the beads or strips dependent upon the movements of the sash, and to insure the proper binding of the said beads or strips against the sash, whenever the latter is in its adjusted position, the sash is provided with means for engaging the beads or strips or projections on the latter, whereby the said beads or strips are adapted to partially or wholly support the weight of the sash, and to be thereby moved into engagement with the sash. Conveniently, the ordinary catches indicated at *F* may be used in connection with racks *G* secured to the beads or strips for effecting the desired object, and in order to insure the weight of the sash being utilized to depress the beads or strips when the sash is in its closed position, the racks are preferably provided with bottom projections or shoulders *g* with which the catches cooperate when the sash is in closed position.

In the preferred construction the catches are provided with set screws *f*, or equivalent devices, adapted to contact with the shoulders or projections *g*, whereby the closing movement of the sash may be made to invariably depress the beads or strips so as to contact firmly with the edges of the sash and at the same time the bottom of the sash may be brought into such proximity to the sill or water-table of the casing as to make the structure water-tight.

As a convenient and preferred construction, the racks *G* are formed integral with the lower guide fixtures *d*, and the whole

structure is so designed that windows at present in use may be cheaply and easily altered to embody the present improvements, it only being necessary to substitute racks and guide fixtures, such as illustrated herein, for the fastening devices of the beads or strips at present in use, and to provide for the necessary vertical movement of the beads or strips.

10 While I have described the invention as making use of the inner beads or guide strips for the sash, it will be understood that the movable beads or guide strips may be applied over those at present in use, in which event they will constitute supplemental sash holding strips adapted to project against the sash when the latter is in its adjusted position, but the ordinary movements of the sash will be guided by the usual beads and strips now commonly employed.

Having thus described the invention, what is claimed as new and desired to be secured by Letters Patent, is:

1. The combination with a window sash and frame, of a bead or strip extending parallel with the sash and movably mounted on the frame, of cooperating projections on the sash and movable bead or strip, whereby the weight of the sash is supported in whole or in part by the movable bead or strip, and the latter is thereby moved into contact with the sash.

2. In a window sash holder, the combination with a strip or bead mounted in guides to move toward and from the sash, a catch movable with the sash, and a plurality of shoulders carried by the bead and with which the said catch cooperates to support the weight of the sash and move the strip or bead toward the sash.

3. In a window sash holder, the combination with the sash, casing, and bead or strip mounted in guides on the casing to move diagonally toward and from the sash, of cooperating projections on the sash and bead or strip, whereby the weight of the sash is adapted to be supported by the bead or strip

and the latter thereby moved into contact with the sash.

4. In a window sash holder, the combination with the sash and frame in which the sash is movably mounted and vertically arranged beads or strips mounted on the frame to move diagonally toward and from the sash, racks mounted on said beads or strips and catches for cooperation with said racks, mounted on the sash, substantially as described.

5. In a window sash holder, the combination with the frame, sash movably mounted in said frame and guide beads or strips mounted on the frame to move diagonally toward and from the sash, the racks mounted on said beads or strips, catches mounted on the sash for cooperation with said rack, and projections or shoulders at the bottom of the racks for cooperation with the catches when the sash is in its closed position.

6. In a window sash holder, the combination with the sash, frame in which the sash is movably mounted, and beads or strips mounted on the frame to move diagonally toward and from the sash, of cooperating projections on the sash and beads or strips, and means whereby said projections may be relatively adjusted to support the weight of the sash and move the beads or strips into contact with the sash.

7. In a window sash holder, the combination with the sash, frame in which it is movably mounted, and beads or strips mounted on the frame to move diagonally toward and from the sash, of racks mounted on said beads or strips and having projections or shoulders at their lower ends, and catches mounted on the sash for cooperation with the rack and adjustable projections on said catches for cooperation with the said shoulders or projections on the lower ends of the racks.

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Witnesses:

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