

1,395,384.

Fig. 1.^R

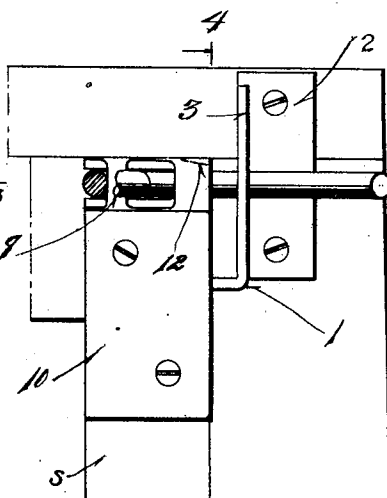


Fig. 2.

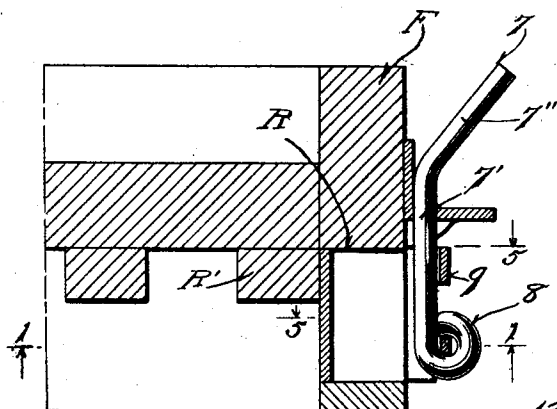


Fig. 3.

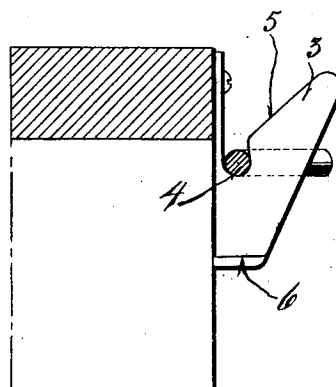


Fig. 4.

Fig. 5.

By
Young and Young
attorneys!

UNITED STATES PATENT OFFICE.

JOHN F. BRODOWSKI, OF MILWAUKEE, WISCONSIN.

SASH-HANGER.

1,395,384.

Specification of Letters Patent.

Patented Nov. 1, 1921.

Application filed February 9, 1920. Serial No. 357,445.

To all whom it may concern:

Be it known that I, JOHN F. BRODOWSKI, a citizen of the United States, and resident of Milwaukee, in the county of Milwaukee and State of Wisconsin, have invented certain new and useful Improvements in Sash-Hangers; and I do hereby declare that the following is a full, clear, and exact description thereof.

10 This invention pertains to new and useful improvements in hanger means for sashes and the like and has particular application to storm-windows, screens and the like.

15 As is well known storm windows are rather frequently hinged at their tops so that they will swing outwardly, and also screens, particularly those of large size, are sometimes mounted in this manner. 20 When the sashes of such are located over the windows of the upper stories of a house, it is very difficult to place the same in position or to remove them for cleaning, storage or the like.

25 It is therefore the primary object of the present invention to provide an efficient supporting means for the sashes of storm-windows, screens and similar closures, whereby these members may be quickly and easily 30 mounted in position or removed without any of the usual attendant difficulties and dangers.

35 A further object is to provide a simply constructed hanger which will effectively support a sash in either one of two positions.

40 An additional object is to provide an arrangement of this character which can be inexpensively manufactured and easily applied to ordinary window-frames and sashes of storm-windows, screens and the like.

45 With these general objects in view, the invention consists in certain novel features of construction, combination and arrangement of parts which will be hereinafter more particularly described and claimed.

50 In the accompanying drawing, Figure 1 represents a transverse sectional view through a portion of a window-frame and a sash which is supported therein by my improved hanger means, said section being

taken substantially on the plane of the line 1—1 of Fig. 3.

Fig. 2 is a front elevational view of one corner of a window-frame and a sash showing the application of my invention thereto, the latter being partly in section. 55

Fig. 3 is a horizontal section taken substantially on the plane of the line 3—3 of Fig. 1. 60

Fig. 4 is a detail vertical section on the line 4—4 of Fig. 2, and

Fig. 5 is a similar view taken approximately on the plane of the line 5—5 of Fig. 3. 65

In the drawing only fragmentary views of a window-frame and sash have been illustrated, and the invention is shown applied only to one side of a sash, but it is to be understood that the same type of hanger 70 means is adapted to be applied to opposite corresponding sides of the sash and window-frame. Furthermore it is obvious that the sash may be provided with a glass pane to form a storm window or covered with netting to provide a screen. 75

Therefore, referring more particularly to the drawing, it will be seen that the window-frame is designated by the reference character F and the sash by the character S, the latter under normal conditions being seated 80 in the usual recess R in the outer portion of the former. In other words the sash rests against the ordinary retaining strip R'. The sash is designed to be hinged at its upper 85 edge so that its bottom portion may swing outwardly and be supported in this position by the improved construction illustrated in my co-pending application for patent filed herewith. 90

The hanger means, one of which is located on each side of the frame F and sash S, includes a bearing member 1 having an attaching plate 2 for securement to the frame F, and a bearing ear 3. From Fig. 4 it will 95 be seen that this ear 3 has a semi-circular bearing seat 4 and an inclined edge 5 for directing a pintle therinto. This bearing member 1 is spaced to one side of the vertical edge of the recess R, and the ear 3 is parallel 100 thereto. A guide 6 extends from the lower portion of the ear 3 to this vertical edge of

the recess R to aid in directing the sash into said recess.

The element which is carried by the sash consists of a pintle 7 having a pair of bearing surfaces 7' and 7''. From Fig. 3 it will be seen that this pintle is in the form of an arcuate rod having an eye 8 at one end whereby it may be pivoted in a bracket 9 carried by the sash S. This bracket is substantially inverted U-shaped and includes a pair of strap attaching portions 10 which are disposed respectively on the inner and outer faces of the vertical portion of the sash S. The upper portion of the sash within the bracket 9 is recessed as at 11 to receive the portion of the pintle 7 adjacent the eye 8 when the sash is moved outwardly of the frame in a manner to be hereinafter more particularly described. Normally the bearing portion 7' of the pintle 7 is in engagement with the bearing seat 4 of the ear 3, and the parts are held against accidental movement out of this relationship by a depressed portion 12 formed in that portion of the bracket 9 which normally houses the pivoted end of the pintle (see particularly Fig. 5).

In operation, assuming that a sash equipped with my invention is to be pivotally mounted upon a window-frame also equipped with a portion of the invention, the pintles 7 are swung upon their pivots to a position wherein their major parts are concealed within the recesses 11 of the sash, their exposed parts consisting of the bearing portions 7'' which project from the sides of the sash at its inner edge. These pintles are then disposed on the ears 3, and the inclined surfaces 5 thereof direct the same into the seats 4. The sash is thus hung from the bearing members 1, but is positioned exteriorly of the frame F, or in other words the inner surface of the sash is in a plane disposed outwardly of the plane of the outer face of the frame.

To properly seat the sash within the recess R of the frame, it is now merely necessary to press the former inwardly or toward the frame, and it will be directed into said recess by the guides 6. As the sash moves into said recess, the pintles 7 will swing on their fulcrums outwardly, the portions thereof between the bearing parts 7' and 7'' sliding through the seats 4. When the sash is properly positioned within the recess R of the frame F, the pintles will have been swung outwardly until their pivoted end portions are substantially parallel to the outer surfaces of the frame and sash, see Fig. 3, the bearing portion 7' being then in cooperation with the seats 4 of the ears 3. Likewise the pivoted end portions of the pintles will have been snapped beneath the detents 12 to retain them in their normal positions. As a result of this manipulation,

the sash is not only disposed within the frame F, but is pivotally mounted thereto so that its lower end may be swung outwardly at will.

In removing the sash the foregoing described operations are merely reversed, or in other words the sash is forced outwardly of the frame and the pintles 7 moved inwardly into the recesses 11. From this description it will be obvious that I have invented an extremely simple, yet very efficient hanger means whereby storm-window sashes and the like may be placed in position on window-frames without difficulty.

Various changes may be made in the form and proportions of the different parts of the invention, or in the manner of mounting and assembling the same, without departing from or sacrificing any of the advantages thereof.

I claim:

1. In combination, a frame having a sash opening, a sash movable into and out of said opening, and means carried by the frame and sash for hingedly mounting the latter on the former in either one of two positions, namely when the sash is disposed within said sash opening or when located exteriorly of the frame.

2. In combination, a frame having a sash opening, a sash movable into and out of said opening, bearing members carried by the frame, pintles connected with the sash and rotatably disposed in said bearing members, said sash being thereby hinged to the frame both when disposed in the sash opening and when located exteriorly thereof.

3. In combination, a frame having a sash opening, a sash normally disposed within the said sash opening, but being movable laterally of the frame and positioned exteriorly thereof, a bearing member on the frame, and a pintle carried by the sash and rotatably disposed in the bearing member, said pintle having a pair of bearing surfaces, one being engageable with the bearing member when the sash is seated in the frame opening and the other cooperating with the bearing member when the sash is positioned exteriorly of the frame.

4. In combination, a frame having a sash opening, a sash normally disposed within the said sash opening, but being movable laterally of the frame and positioned exteriorly thereof, a bearing member on the frame, and a pintle pivoted to the sash and slidable and rotatable in the bearing member, said pintle being in cooperative relation with said bearing member both when the sash is located within the sash opening of the frame and when disposed exteriorly of the latter.

5. In combination, a frame having a sash opening, a sash normally disposed within the said sash opening but being movable laterally of the frame and positioned exteriorly

thereof, said sash having a recess, a bearing member on the frame, a pintle pivoted to the sash, one portion having coöperative engagement with the bearing member when the sash is seated in the opening of the frame, said portion of the pintle being swung into said recess when the sash is moved outwardly of the frame opening to dispose a second portion of the pintle into engagement with the bearing member.

In testimony that I claim the foregoing I have hereunto set my hand at Milwaukee, in the county of Milwaukee and State of Wisconsin.

JOHN F. BRODOWSKI.