BEST AVAILABLE COPY

Nov. 2, 1926. 1,605,458

W. M. NEEB

SASH SUPPORT

Filed June 19, 1924

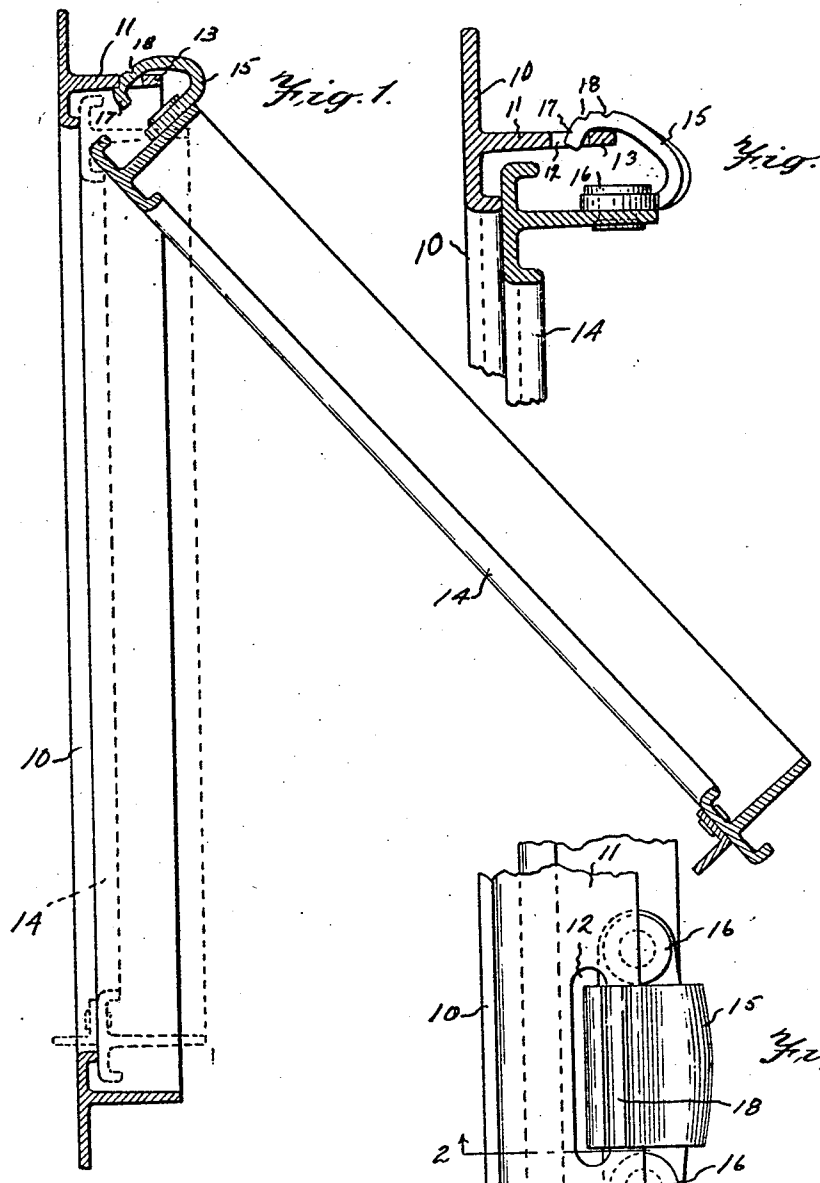

Fig. 1.

Fig. 2.

Fig. 3.

INVENTOR.
William M. Neeb
BY
Gifford & Beall
ATTORNEYS

BEST AVAILABLE COPY

Patented Nov. 2, 1926. 1,605,458

UNITED STATES PATENT OFFICE.

WILLIAM M. NEEB, OF PATERSON, NEW JERSEY, ASSIGNOR TO THE BOGERT-CARLOUGH COMPANY, OF PATERSON, NEW JERSEY, A CORPORATION OF NEW JERSEY.

SASH SUPPORT.

Application filed June 19, 1924. Serial No. 720,398.

My present invention relates to hinged supports for window sashes, doors, or the like, in which such supports are arranged to permit the sash or door to be swung, and preferably such a support as will permit the sash or door to be supported at the top and to be swung upward and outward and held in predetermined position out of the vertical. My invention will be best understood from the annexed description, of an illustrative embodiment shown in the drawings, in which Fig. 1 is a section through a window casing and sash with the sash shown in open position in full lines and in closed position in dotted lines; Fig. 2 is an enlarged view of a portion of Fig. 1 showing the hinged support in the position which it occupies when the sash is closed, this section being taken on the line 2—2 of Fig. 3, and Fig. 3 is a plan view of Fig. 2.

Like reference characters indicate like parts in the different views.

In the illustrative embodiment, the casing 10 has a lintel portion 11 with an opening 12 near its edge so as to provide a portion 13 to form a pintle for the hinge, as will be set forth more in detail hereinafter. The sash 14 is arranged to extend over the opening in the casing 10 in the usual manner and is supported at the top by a loop member 15 attached to the sash 14 by the fasteners 16, the loop member having its inner end 17 extending into the opening 12 and hanging on the pintle 13.

As shown in Fig. 2, when the sash 14 is in closed position, the interior of the loop member 15 partially surrounds the pintle 13 and, of course, sustains the weight of the vertically positioned sash 14. If it is desired to swing the sash 14 outward to the position shown in Fig. 1, the sash is turned on the pintle 13 in the usual manner, but because of the relative width of the opening 12, the thickness of the end 17 and the internal conformation of the loop member 15, the sash, after it has been swung to the desired position will move by its own weight into the position shown in Fig. 1, the weight of the sash carrying the loop member slightly downward and to the left of Fig. 1 to cause the exterior of the end 17 to contact with the edge of the opening 12. For some purposes, the frictional engagement between the exterior of the loop member 15 and the edge of the opening 12 in the lintel will be sufficient to hold the sash 14 in adjusted position, since it will be obvious that the weight of the sash 14 tends to rotate the loop member 15 around the pintle and to thus press the end 17 against the edge of the opening 12. For greater certainty, however, I preferably provide a plurality of notches 18 in the exterior of the loop member 15, so that one of such notches will engage with the edge of the opening 12 to lock the sash in the desired predetermined open position. In order to close the sash 14, it will be necessary to move it laterally in Fig. 1 and also to raise it slightly so that the end 17 will be moved to the right and out of engagement with the edge of the opening 12. With the sash in this position, it can be turned to a new position or to closed position. If it is turned to a new and higher position, as soon as it is released, its weight will again cause it to move downward and to the left of Fig. 1, to bring another notch 18 into engagement with the edge of the opening 12.

As shown, the end 17 of the loop 15 is separated from the sash 14 a distance greater than the thickness of the pintle 13, so that the sash can be removed and replaced in the casing without the removal of fastenings and the like.

In the foregoing description I have described only one hinge, but it will be understood that two will be applied in the usual manner and more if necessary to support the weight of the sash or the like.

While I have shown my hinge arrangement in connection with a sash, it will be understood that it can be applied to any arrangement in which a movable member is arranged swingingly to close an opening and, furthermore, that while I have shown it at the top of a sash or the like, it may also be used to support the lateral edge of such sash or the like, except that in such case, a spring or the like would have to be provided to take the place of gravity to hold the end 17 in contact with the edges of the opening 12.

It will also be understood that the arrangement which I have illustrated is one which can be cheaply manufactured and yet which will be effective to hold a window or the like

BEST AVAILABLE COPY

in desired open position. It will also be understood that the embodiment of my invention may be widely varied.

I claim:

1. In combination, a casing having a relatively thin flat lintel with an opening adjacent its edge, a movable member having a loop hinge member extending over the edge of the lintel with one end extending through said opening, the exterior and interior of the end of the loop extending through said opening being arranged to be pressed into contact with diagonally opposed edges of said opening by the weight of the movable member when the latter is out of vertical position, and the interior of the loop member being shaped to permit the movable member to be moved laterally and upwardly to disengage the end of the loop member from contact with the edges of said opening.

2. In combination, a casing having a relatively thin flat lintel with an opening adjacent its edge, a movable member having a loop hinge member extending over the edge of the lintel with one end extending through said opening, the exterior and interior of the end of the loop extending through said opening being arranged to be pressed into contact with diagonally opposed edges of said opening by the weight of the movable member when the latter is out of vertical position, and the interior of the loop member being shaped to permit the movable member to be moved laterally and upwardly to disengage the end of the loop member from contact with the edges of said opening, said exterior of the end of the loop member having notches transversely thereof to engage the edge of said opening and hold said movable member at selected positions out of the vertical position.

3. In combination, a casing having a relatively thin flat lintel with an opening adjacent its edge, the portion of the lintel between said edge and said opening forming a pintle, a movable member having a loop hinge member extending over said pintle with one end having its exterior eccentric to the portion of the pintle with which said loop hinge member contacts when said movable member is out of vertical position, and the interior of the loop member being shaped to permit the movable member to be moved laterally and upwardly in relation to said pintle, the end of the loop member extending through said opening being spaced from said movable member a distance greater than the thickness of said pintle.

4. A hinge adapted to secure itself in adjusted positions and to furnish support to a window sash or the like including a flat member, a perforation therethrough, a loop member with a free end adapted to be positioned in said perforation and adapted at its other end to furnish support to an article, said loop being constructed and arranged so as to be movable through said perforation, means normally biasing said loop toward the diagonally opposed marginal edges of said perforation whereby the loop normally engages and is immovably retained by said means to the edges of said perforation, and the article supported thereby is held rigidly in any desired position of adjustment.

5. A hinge member adapted to support a frame in selected positions including a flat member positioned approximately horizontally, a perforation therethrough, a loop to support the frame and having a free end in said perforation, said loop being smaller than said perforation, whereby it may be movable therethrough, at an angle to the horizontal and bear on and grip diagonally positioned edges of said perforation whereby the frame is adjustably and removably hung from said flat member and retained in selected positions due to the weight of the frame.

WILLIAM M. NEEB.