March 18, 1952 R. S. BROWNIE 2,589,768

STAY BAR CONSTRUCTION

Filed July 21, 1950

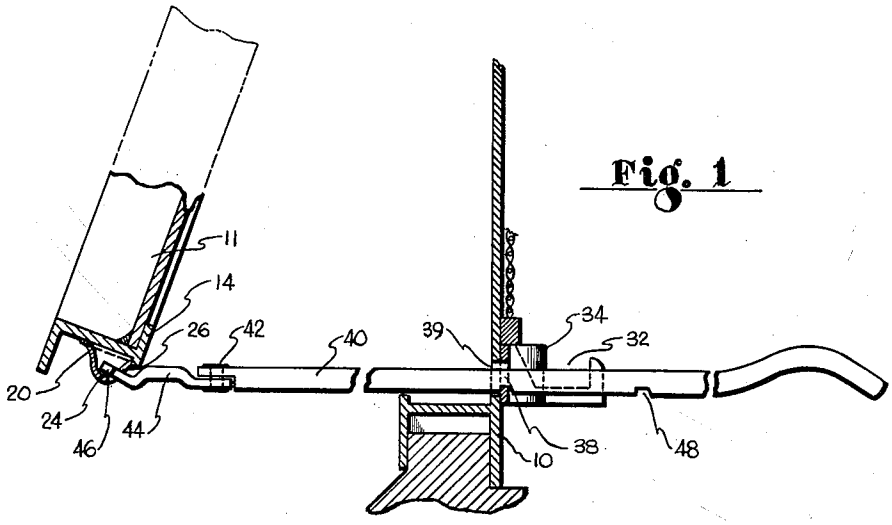


Fig. 1

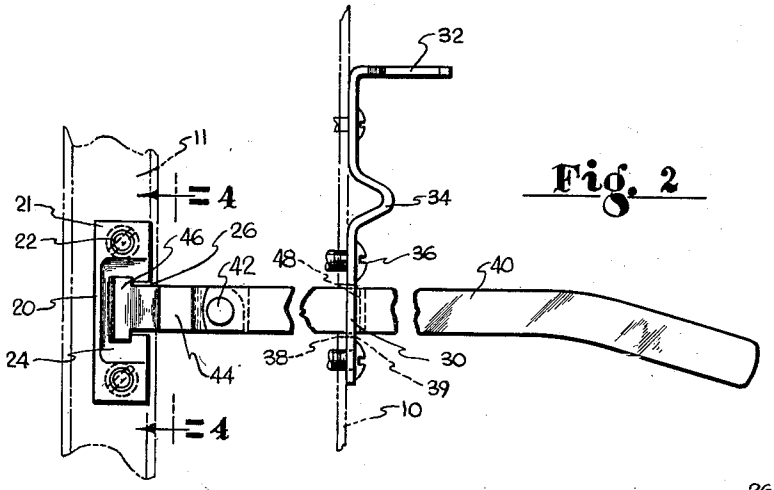


Fig. 2

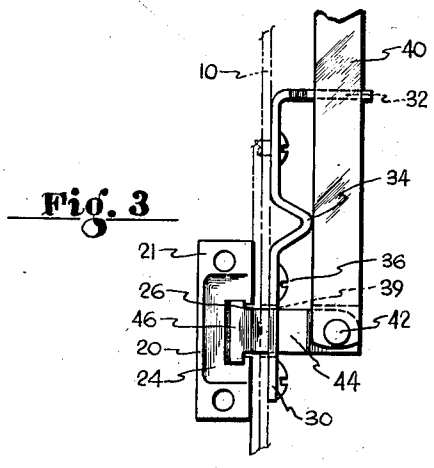


Fig. 3

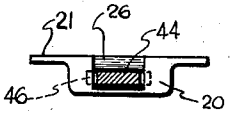


Fig. 4

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STAY BAR CONSTRUCTION

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1 Claim. (Cl. 292—265)

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Be it known that the undersigned has invented certain new and useful improvements in stay bar constructions, of which the following is a specification.

This application relates to stay bar constructions.

Stay bars are often used to hold a ventilator in open adjusted position and, likewise, for locking it closed. Such stay bars, particularly when used for ventilators which are hinged at their upper horizontal edge, generally include a hinge connection means between a pivot link of the stay bar construction and a hinge plate secured to the under surface of the lower edge of the ventilator frame. This application relates specifically to means for providing a novel form of hinge connection between a stay bar link and a hinge plate so located.

As contrasted from the conventional construction which employs a hinge and pintle type of construction, there is employed here a notch and T end construction which is not only much cheaper than the hinge and pintle construction, but is likewise stronger and also provides greater freedom of motion of the stay bar link with respect to the ventilator to compensate for irregularities in window production and assembly and mounting. In addition, the notch and T construction herein disclosed enables the hinge plate and the stay bar to be shipped from the point of manufacture to the point of use without assembly of the parts to each other in the shop, and this, in turn, dispenses with an assembly operation in the shop, thus reducing the cost of the parts further, as well as eliminating one part, namely the pintle of the hinge.

For an understanding of the construction herein disclosed, reference should be had to the appended drawing.

In this drawing:

Fig. 1 is an elevational section view of a window showing a stay bar construction in use.

Fig. 2 is a plan view of the stay bar construction as if in use on a window ventilator in open position.

Fig. 3 is a similar view but with the parts shown as if the ventilator is in closed position.

Fig. 4 is a section view as if on line 4—4, Fig. 2.

Fig. 1 shows the lower horizontal member of a stationary window frame 10 against which and from which is adapted to move a ventilator 11 hinged at its upper edge and having a frame, only the lower edge portion 14 of which is shown.

To the under surface of the frame 14 is detachably mounted a plate 20 having attaching

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wings 21, secured by screws 22. The plate 20 is formed to provide a hollow, open-sided dome 24 closed by frame 14 and having a notch 26 in its side.

Secured to the vertical inside surface of the stationary frame 10 is a keeper 30 having a locking notch 32 and a clamping hump 34. Screws 36 mount the keeper 30 to the surface 10 and such keeper and such surface have aligned holes 38–39 through which projects a stay bar 40 connected by a pin 42 to a stay bar link 44 having a T end 46. Stay bar 40 has notches 48 for cooperating with the lower edge of the hole 39 in the frame 10 through which the stay bar passes for holding the ventilator in adjusted position.

Except for the formation of the plate 20 and of the T end 46 of the stay bar link 44, the parts are conventional. The parts unique to this invention, however, namely the plate 20 and the T end 46 of the stay bar link 44, provide a novel and superior means for detachably and hingedly connecting the end of the stay bar link 44 to the ventilator frame 14. There is no pintle in the construction herein shown. Instead the cooperation of the T end 46, when seated in the dome 24 through the notch 26 of the plate 20, provides the connection desired.

During the manufacture of the stay bar construction hereof, it is not necessary to assemble the plate 20 with respect to the link 44, but rather these parts are shipped separately to the point of use. However, when the stay bar construction is to be installed, the T end 46 of the stay bar link 44 is inserted into the dome 24 of the plate 20 through the notch 26 and thereupon and thereafter the plate 20 is secured in a conventional way by the screws 22 to the frame 14, and the frame 14 functions for closing the dome 20 and thus blocking the notch 26 and maintaining the T end 46 of the link 44 nondetachably in the dome 24. However, the T end 46 is loosely fitted into said dome and has considerable freedom of motion, more than is available with conventional hinge and pintle constructions.

Now having described the construction herein disclosed, reference should be had to the claim which follows.

I claim:

In a stay bar construction for a swinging ventilator of the type hingedly mounted on its upper edge, the stay bar construction comprising a stay bar and a link pivotally connected

thereto by a vertical axis pivot pin, means for pivotally connecting the link to the under surface of the lower horizontal member of the frame of the ventilator comprising a plate adapted to be mounted under and against such lower surface of the ventilator frame, said plate having a hollow, open-sided dome with a notch therein, said link having a T-shaped end adapted to seat in said dome and enter it through said notch, the link and the plate being separate members, detachably assembled to each other until the plate, with the link end in it, is attached to the ventilator frame with the ventilator frame then closing said dome and thus retaining the link end loosely but nondetachably in said dome.

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