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F. J. LINDLOFF

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WINDOW WORKER'S SCAFFOLD

Filed Jan. 10, 1929

Fig. 1

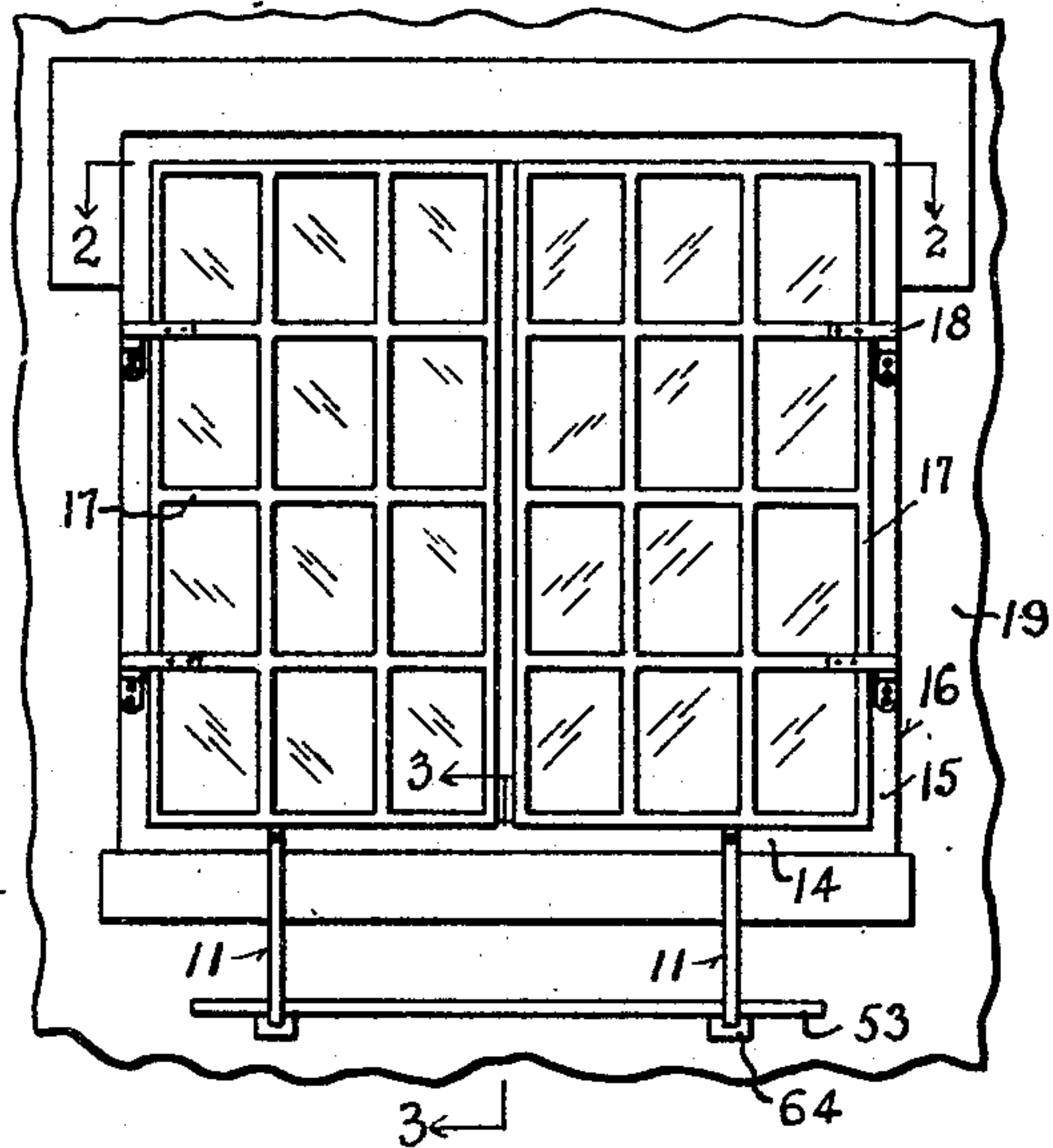


Fig. 2

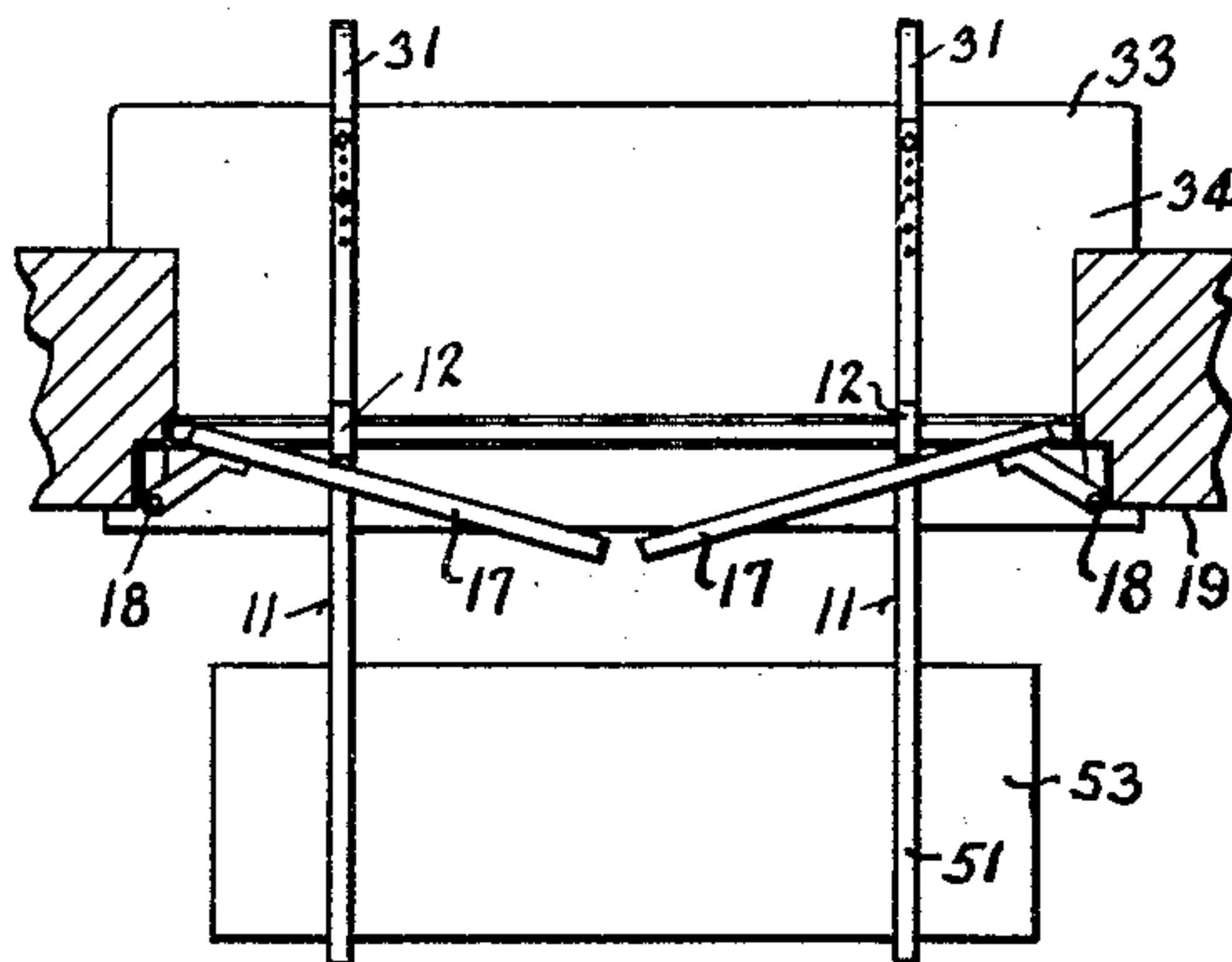


Fig. 5

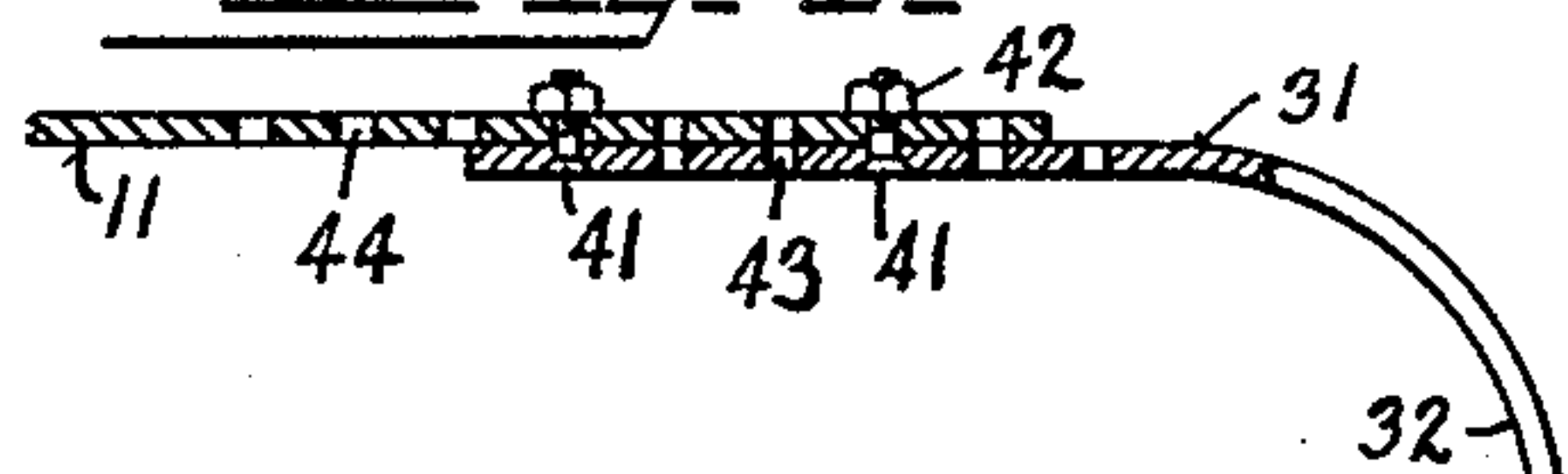


Fig. 6

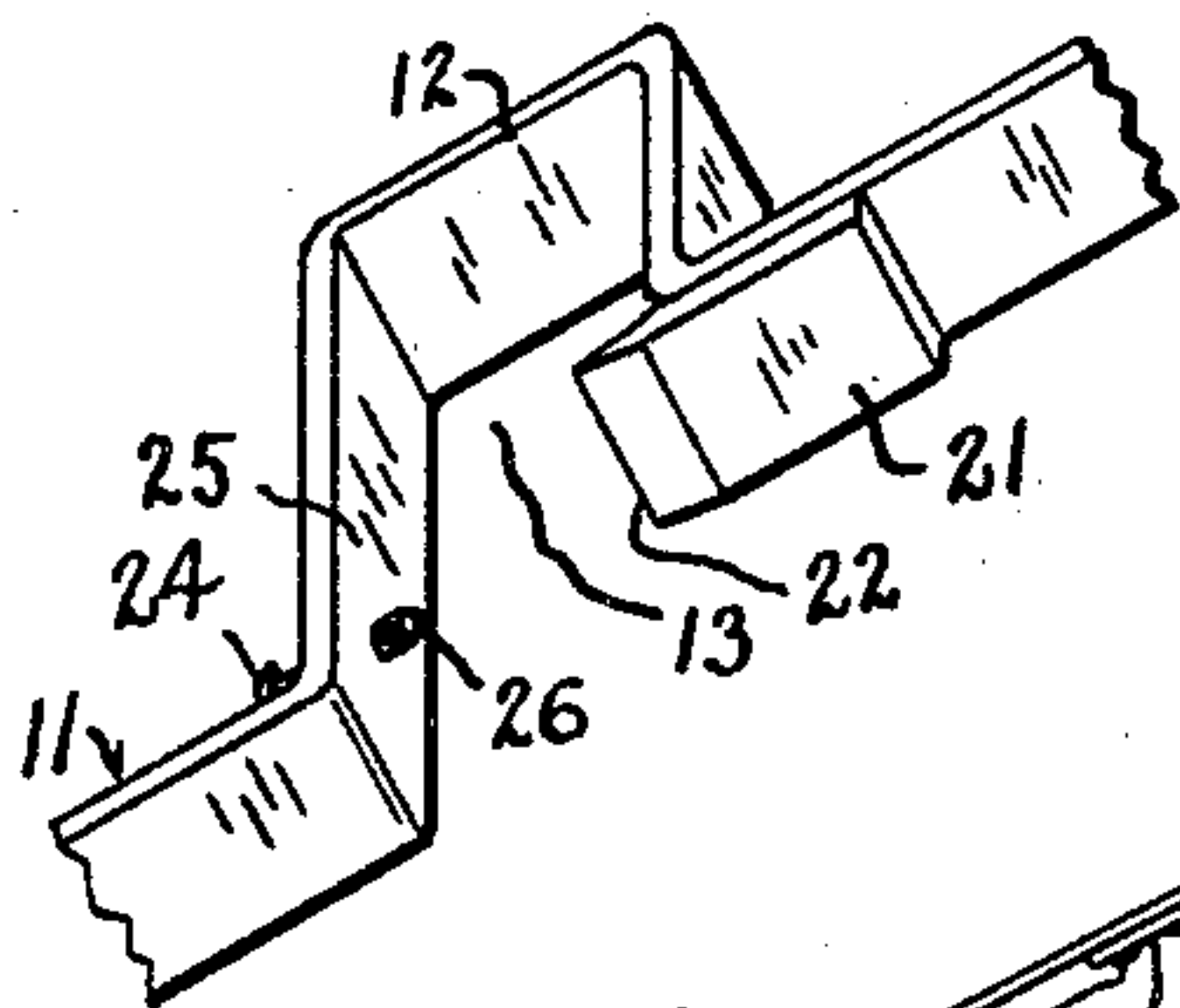


Fig. 3

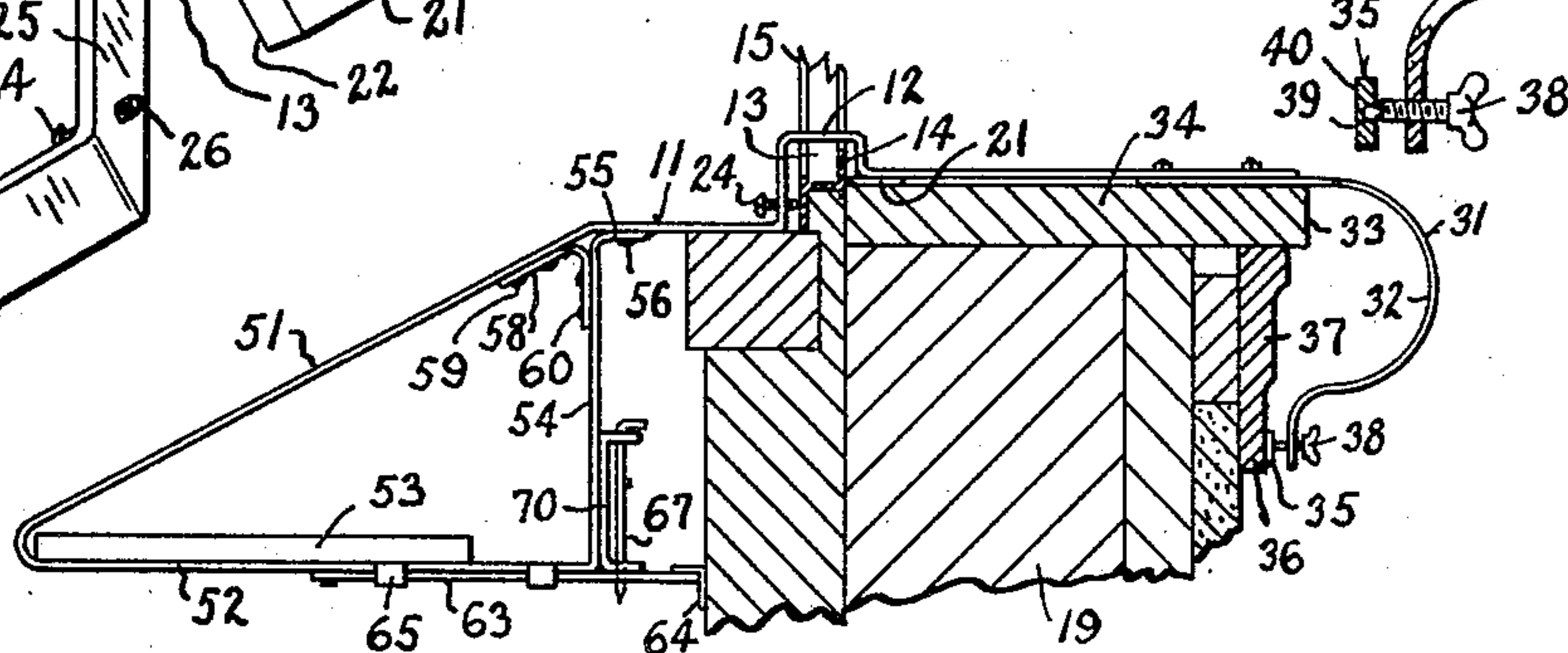


Fig. 4

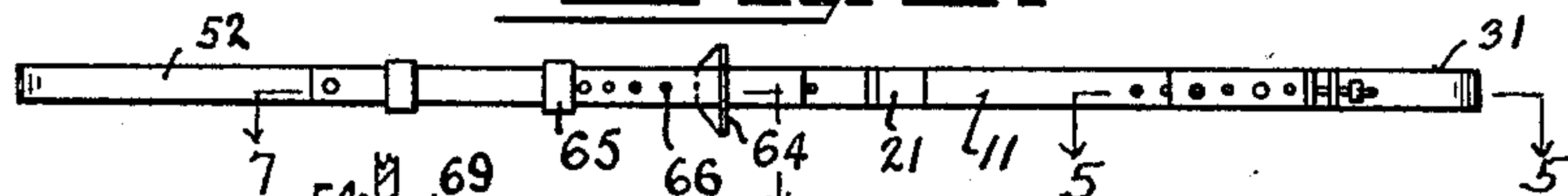
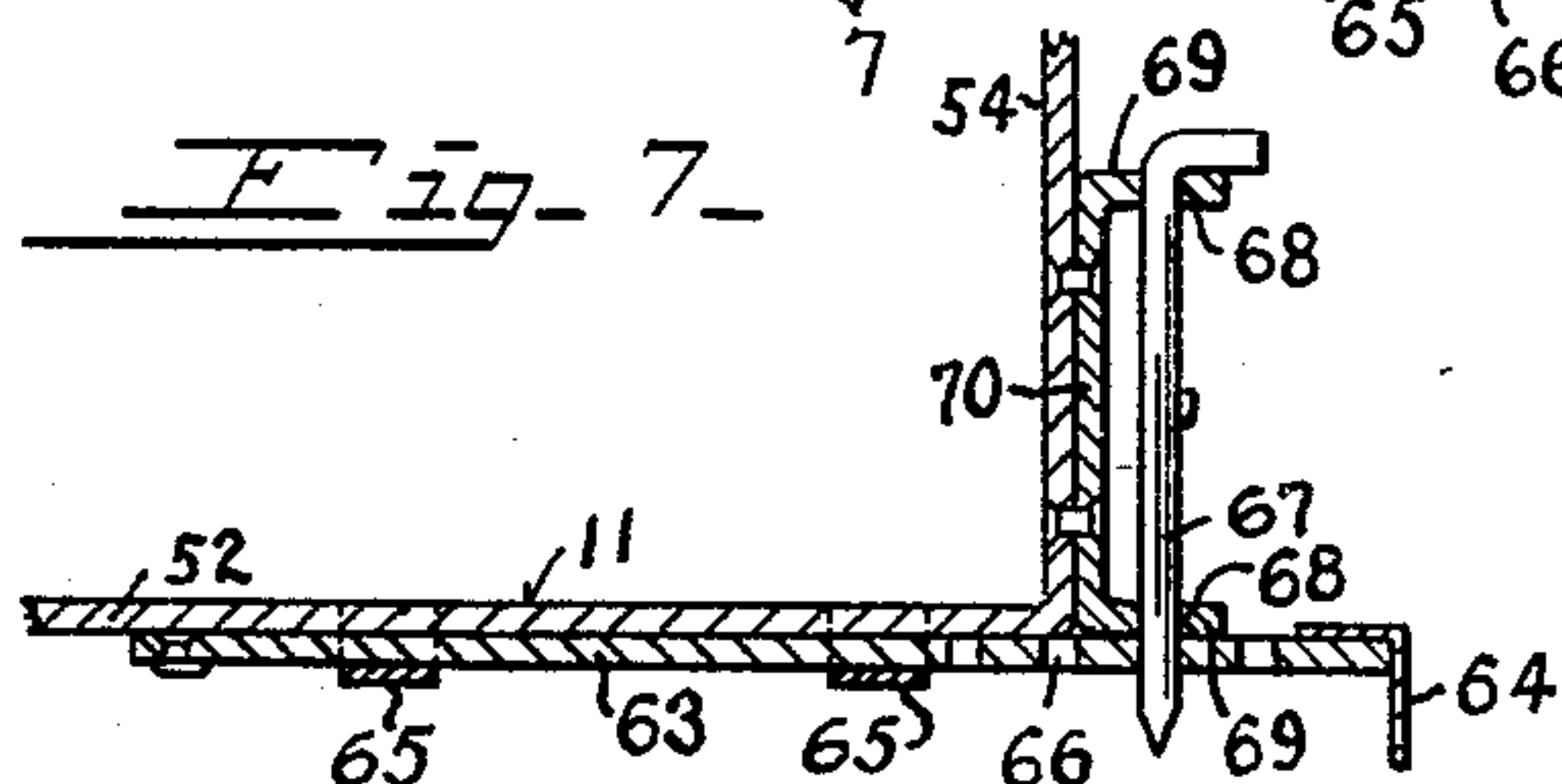


Fig. 7



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UNITED STATES PATENT OFFICE

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WINDOW-WORKER'S SCAFFOLD

Application filed January 10, 1929. Serial No. 331,427.

My invention relates to window workers' scaffolds, and is intended for use by glaziers, painters, iron workers, window cleaners and others, who find it necessary to perform work on the outsides of windows, and is especially applicable in connection with metal windows, and particularly in connection with casement windows in which the sashes are hinged so as to swing outwardly.

It is the practice in the building trades to build metal casement windows into the wall of the building, and to glaze the sashes, paint the windows and perform other operations upon the same, after the metal casement windows are in the wall. This necessitates work upon the outer faces of the windows, and, as the sashes swing outwardly, the outer faces of the windows are accessible only from the outside of the building. It has been the usual practice heretofore to perform the work upon the outsides of such windows from scaffolds which are suspended by ropes from the cornice of the building, which has been found to be expensive and dangerous, especially in work on windows of high buildings.

It is the object of my invention to avoid these objections, and to provide a convenient support at the outside of the wall at the window, so that a workman may be readily and safely supported at the outside of the window while performing work upon the window.

It is the object of my invention further to provide a simple and convenient support for a scaffold board, and simple and convenient means for securing the support at the sill of the window, and to provide novel means whereby the parts may be adjusted for convenient location upon walls of different thicknesses and in situations where casements are differently placed in the window openings.

The invention will be further readily understood from the following description and claims, and from the drawings, in which latter:

Fig. 1 is an outside side elevation showing my improved device in position of use, the wall being partly broken away.

Fig. 2 is a plan section of the same, taken on the line 2—2 of Fig. 1.

Fig. 3 is a vertical section of the same, taken on the line 3—3 of Fig. 1, the window-sash being omitted.

Fig. 4 is a bottom view of my improved device.

Fig. 5 is a fragmentary section of my improved device, taken on the line 5—5 of Fig. 4.

Fig. 6 is a perspective view of a detail of the same; and,

Fig. 7 is a fragmentary section of my improved device, taken on the line 7—7 of Fig. 4.

My improved device comprises a bar 11, in which there is an upward bulge 12, forming a lower recess 13, for receiving the lower cross-member 14 of the frame 15 of a metal casement 16, to which frame, the sashes 17 are hinged, as by means of hinges 18 so as to swing outwardly with relation to the wall 19 of the building.

The bar is provided with a contact-part 21 at one side of said recess for contacting the lower cross-member 14. This contact-part is preferably provided with a sharp contact-edge 22, for instance, a knife edge, which is arranged to gouge into the cross-member for locating the contact-part on the cross-member. A clamp-screw 24 has threaded connection in the wall 25 of the bulge 12, the inner end of the clamp-screw being arranged to be clamped against the outer face of the cross-member. The inner end of the clamp-screw is preferably provided with a sharp end 26, arranged to gouge into the cross-member. These means rigidly secure the bar 11 to the cross-member.

A bar-extension 31 is provided for the inner end of the bar. This bar extension is provided with an outward bulge 32, arranged to be received about the inner portion 33 of the window sill 34. The lower end of the bar extension is provided with an adjustable stop 35 arranged to bear upon the inner face 36 of the wall, for instance, upon the finish piece 37. The stop is preferably in the form of a screw 38 having threaded connection with the lower end of the bar-extension, and

having swivel connection 39 with a contact-plate 40, arranged to contact said inner face.

The bar-extension is adjustable on the inner end of the bar by means of screws 41 and nuts 42, the screws being received through selective ones of registering holes 43, 44, the holes in the bar-extension being arranged to register with selective holes in the inner end of the bar, the screws and nuts clamping the bar-extension and bar rigidly together in adjusted positions. The bar-extension is adjustable lengthwise of the bar for accommodating different thicknesses of wall and different relations between the casement and the inner face of the wall.

The outer end of the bar has a downwardly inclined outwardly extending portion 51, from the outer end of which a supporting portion 52 of the bar extends toward the wall of the building. This support is arranged to support a scaffold-board 53. The support is preferably substantially lower than the portion of the bar which is received crosswise of the window-sill so as to materially decrease the tilting strain upon the bar and the securing means between the bar, the cross-member of the casing and between the bar-extension and the inner face of the wall.

The bar is continued upwardly from the inner end of the supporting portion 52 thereof as a hanger-bar 54, the upper end of which is secured to the bar 11, as by being provided with an angularly bent portion 55 secured to the bar by a rivet 56. An acute angle member 58 may also be located in the acute angle between the downwardly outwardly slanting portion 51 of the bar and the hanger portion 54 thereof. The angle member is riveted respectively to said bar portions by rivets 59, 60.

A brace 63 is provided for bracing the scaffold-board support against the wall of the building. This brace is shown at the lower end of the scaffold. It is shown as a bar provided with a shoe 64 at its inner end, arranged to be supported by the outer face of the wall and forming a stop for the outer portion of the scaffold. The brace is adjustable lengthwise of the supporting portion 52, as by being slidable in straps 65 depending from the bar-portion 52 and forming loops about the brace. The brace is exemplified as an iron bar. It is provided with holes 66, in which a pin 67 is selectively received for positioning the brace with relation to the scaffold-board support. The pin is axially movable in holes 68 in flanges 69, extending from the hanger-portion 54, for instance, from a short bar 70 suitably fixed to said hanger-portion.

The distance between the horizontal planes in which the bulge 12 and the stop 64 are located is substantially greater than the distance between the vertical planes in which said bulge and the inner end of said stop co-

acting with the outer face of the wall of the building are located, for minimizing tilting of the device in use.

The support for the scaffold-board is shown of triangular form, the scaffold-board being located in the loop formed by the triangle, there being one of these supports at each side of the window. The supporting stretch 52 on which the scaffold-board is located, which corresponds to one of the angles of the triangle, extends at right angles to the wall of the building. The hanger 54, which corresponds to the other angle of the triangle, extends parallel with said wall. The bar portion 51, whose position corresponds to the hypotenuse of the triangle, serves as a hanger and is so formed and located as not to interfere with the movements of the workman.

This structure also locates the scaffold-board in a low position with relation to the sill, for minimizing tilting strain on the fastening means, and for placing the scaffold-board in such position that the workman may readily work upon the lower as well as the upper portions of the window. The structure also permits the workman to be seated on the scaffold-board, with his legs hanging between the scaffold-board and the wall.

The bar portions of the device are preferably made of bar iron.

My improved device is strong and substantial. It is economically manufactured, is readily and conveniently attached to and detached from the building, and enables the workman to work upon the outside of the window casement while the sashes are substantially closed.

Having thus fully described my invention, what I claim as new, and desire to secure by Letters Patent, is:

1. A device of the character described comprising a sill-bar, said sill-bar provided with an upward bulge at its outer portion, said sill-bar having an inwardly extending portion and an outwardly extending portion respectively extending inwardly and outwardly from said bulge, said outwardly extending portion of said sill-bar being lower than said inwardly extending portion thereof, a gouging knife-edge at the inner portion of said bulge, a clamp at the outer portion of said bulge, said gouging knife-edge and said clamp acting in opposite directions, a depending support depending from said outwardly extending portion of said sill-bar, a depending clamp depending from said inwardly extending portion of said sill-bar, and means between said depending clamp and said inwardly extending portion of said sill-bar for adjusting said depending clamp toward and from said bulge.

2. A device of the character described comprising a sill-bar, the outer portion of said sill-bar provided with an upward bulge, said sill-bar having an inwardly extending por-

tion extending inwardly from said bulge and
an outwardly extending portion extending
outwardly from said bulge, said inwardly ex-
tending portion provided with an outwardly
5 acting gouging knife-edge, the outer wall of
said bulge extending lower than said gouging
knife-edge, adjustable clamping means in
said outer wall below the level of said goug-
ing knife-edge, said gouging knife-edge and
10 said clamping means acting in opposite direc-
tions, a support for a scaffold-board depend-
ing from the outer end of said sill-bar, an
adjustable stop acting inwardly at the lower
edge of said support, the distance between
15 the horizontal planes in which said bulge and
said stop are located being greater than the
distance between the vertical planes in which
said bulge and the inner end of said stop are
located, and clamping means at the inner end
20 of said inwardly extending portion of said
sill-bar.

In testimony whereof, I have hereunto
signed my name.

FREDERICK J. LINDLOFF.

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