T. S. THORN.

WINDOW CLEANING PLATFORM.

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1,184,898 Patented May 30, 1916.

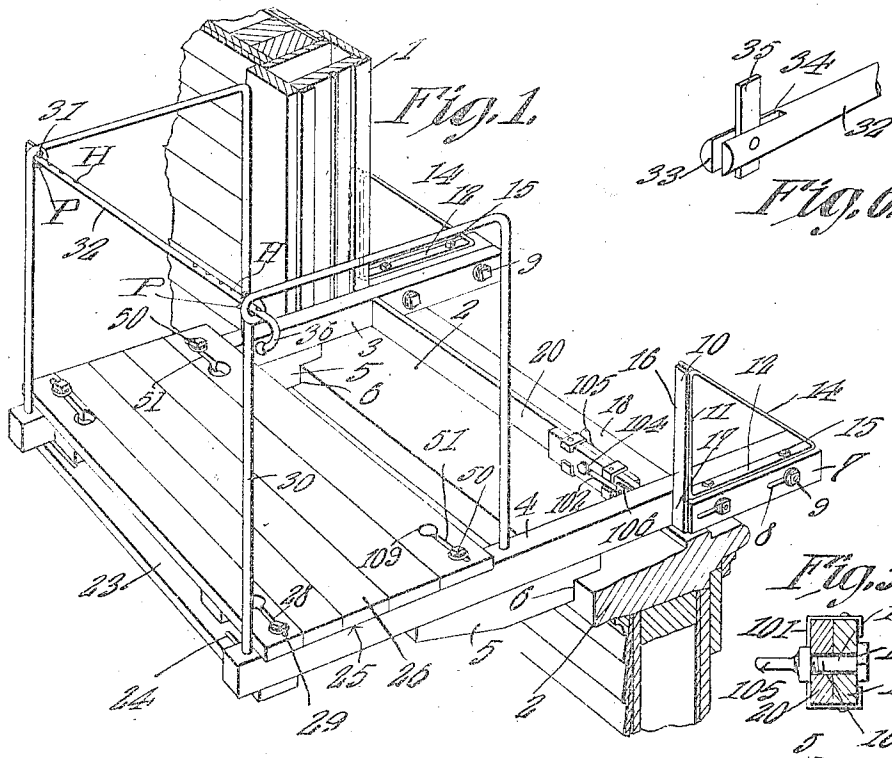


Fig. 1.

Fig. 6.

Fig. 5.

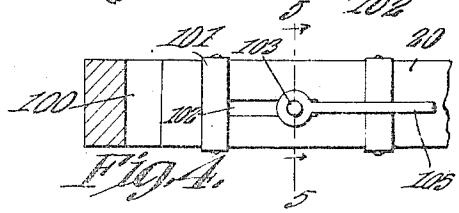


Fig. 4.

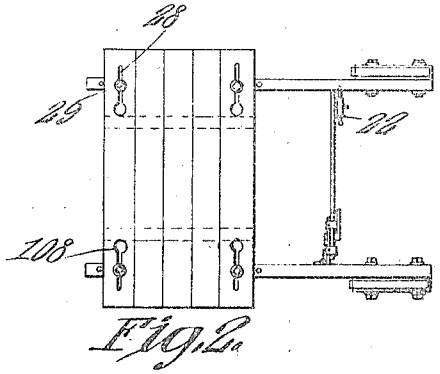


Fig. 2.

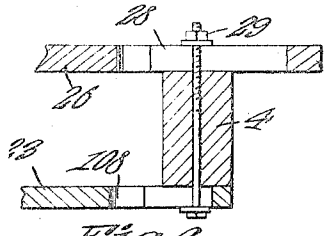


Fig. 3.

Witnesses

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UNITED STATES PATENT OFFICE.

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WINDOW-CLEANING PLATFORM.

1,184,898. Specification of Letters Patent. Patented May 30, 1916.

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To all whom it may concern:

Be it known that I, TIMOTHY S. THORN, a citizen of the United States, residing at Plainfield, in the county of Union and State of New Jersey, have invented a new and useful Window-Cleaning Platform, of which the following is a specification.

The device forming the subject matter of this application is a scaffold adapted to be employed by persons who are cleaning windows from the outside of a building.

One object of the present invention is to provide novel means whereby a scaffold of the type above described may be adjusted and held in adjusted positions to fit windows of different sizes.

Another object of the invention is to provide novel means whereby the scaffold will be rigidly and securely held in place against dropping, without in any way marring the window frame wherewith the structure is assembled.

It is within the province of the disclosure to improve generally and to enchance the utility of devices of that type to which the present invention appertains.

With the above and other objects in view which will appear as the description proceeds, the invention resides in the combination and arrangement of parts and in the details of construction hereinafter described and claimed, it being understood that changes in the precise embodiment of the invention herein disclosed can be made within the scope of what is claimed, without departing from the spirit of the invention.

In the accompanying drawing:—Figure 1 shows the invention in perspective, mounted in place upon a window frame; Fig. 2 is a top plan of the scaffold proper, parts being omitted; Fig. 3 is a fragmental vertical section taken through the scaffold adjacent its forward end; Fig. 4 is a fragmental transverse section taken through one of the side supports and showing the brace in elevation; Fig. 5 is a cross section through the combined brace and closure member on the line 5—5 of Fig. 4; Fig. 6 is a perspective view showing a portion of the guard rail structure.

In the accompanying drawings, the numeral 1 indicates the jambs of a window frame, the sill whereof is denoted by the numeral 2.

In carrying out the present invention there is provided a pair of supports 3 and 4 preferably in the form of beams. Secured to the under sides of the supports 3 and 4 midway between their ends, are blocks 5 provided with seats 6 adapted to receive the outer edge of the sill 2. The rear portions of the supports 3 and 4 rest on the sill 2 when the device is in use, as will be obvious from an inspection of Fig. 1. Those skilled in the art will understand readily that proper changes may be made, in order that the supports 3 and 4 may coöperate with the sill 2, since window sills are of widely different constructions.

Applied to the outer side faces of the supports 3 and 4 near to the rear ends thereof are carriers 7 in the form of blocks, provided with longitudinal slots 8 through which pass clamping elements such as bolt and nut structures 9, the bolt and nut structures 9 being secured in the supports 3 and 4, but being movable in the slots 8 when the carriers 7 are reciprocated for a purpose which will be set forth hereinafter. Mounted upon the carriers 7 are uprights 10 which may be of any desired form. In the present instance, the uprights are of triangular shape, each upright embodying a vertical arm 11, a base 12 and a brace 14, the base 12 being attached to the carrier 7 by means of securing elements 15. Resilient or cushioning facings 16 are secured to the forward faces of the vertical arms 11 and are extended downwardly, as shown at 17 onto the end faces of the carriers 7.

The invention comprises a longitudinally extensible brace embodying a part 20 and a part 100. On the part 100 of the brace are guides 101 in which the part 20 is mounted to reciprocate. The part 20 is provided with a longitudinal slot 102 receiving a bolt 103 held in the part 100 of the brace and having a head 104. Threaded onto the bolt 103 is a lever nut 105 adapted to bear against the part 20 of the brace, the construction being such that the brace may be elongated or shortened at will. The part 100 of the brace is united by means of a hinge 106 with the support 4. A locking device is employed for detachably connecting the part 20 of the frame with the support 3. This locking device may be of any desired form, and in the present instance it is shown as a simple door bolt 22.

Extended between the forward ends of the supports 3 and 4 is a tie bar 23 provided in its end portions with longitudinal slots 24 having inner terminal enlargements 107.

Superposed upon the supports 3 and 4 is a platform 25 comprising transverse boards 26 and cleats 27 uniting the boards. Certain of the boards 26 of the platform 25 are provided with longitudinal slots 28 located adjacent the forward edge of the platform and having inner terminal enlargements 108. Through the slots 28 in the platform and through the slots 24 in the tie bar 23 pass connecting elements, such as bolt and nut structures 29, the same being held in the supports 3 and 4. Mounted in the supports 3 and 4, and if desired, assembled with the blocks 5 are bolt and nut structures 50 mounted to move in elongated slots 51 in the platform, the slots 51 having inner terminal enlargements 109.

Fixed to and upstanding from the supports 3 and 4 adjacent their forward ends, are U-shaped guards 30 which at their forward corners may be bent or otherwise constructed to form eyes 31 through which passes a rail 32 in the form of a rod. The rail 32 is provided in one end with a slot 33 across which extends a pivot pin 34 on which is mounted to swing a latch 35. The latch 35, when disposed transversely of the rail 32, coacts with one eye 31 to prevent the rail 32 from moving endwise, a hook 36 being fashioned on the other end of the rail 32, and being adapted to coact with the other eye 31. In practical operation, the supports 3 and 4 and the blocks 5 are mounted on the sill 2 as shown in Fig. 1. By loosening the bolts 9, the carriers 7 and the uprights 10 may be adjusted inwardly and outwardly, until the vertical arms 11 of the uprights coact with the inner faces of the jambs 1, it being observed that the function of the cushioning facing 16 is to prevent a marring of the jambs 1. The carriers 7 and the uprights 10 may be held in adjusted positions by tightening up the bolts 9. The structure may be adapted for window frames of different widths, by moving the supports 3 and 4 toward and away from each other, the function of the slots 28 and 24, and the connecting elements or bolts 29 now being readily understood. Cotter pins P inserted through holes H in the rail 32 and coöperating with the eyes 31 constitute a means whereby the effective length of the rail may be altered. When it is desired to remove the rail 32, the latch 35 is placed parallel to the rail 32, the rail is moved endwise and is swung downwardly, the same being supported by the hook 36.

Especial attention is directed to the brace 20—100. This part of the structure serves to hold the supports 3 and 4 apart at their inner ends, so that the vertical arms 11 of the uprights 10 will coact properly with the inner faces of the jambs 1. The brace 20—100 has another function in that, when the window is shut down, the brace acts as a closure for the space between the lower edge of the window and the sill 2, thereby preventing the entrance of air into the apartment. The construction of the brace, obviously, is such that it may be lengthened or shortened at will, a single brace being effective for window frames of different widths.

Since the various slots in the platform and in the tie bar are provided at their inner ends with enlargements of which the enlargements 108 may be taken as typical, the platform may be removed from the supports 3—4 without detaching the nuts on the connecting bolts, it being necessary merely to slide the supports 3—4 toward each other, until the enlarged ends of the bolts may pass through the enlargements 107—108—109, it being possible thus to detach the platform from its supports by merely loosening the nuts on the connecting bolts, without removing such nuts completely from the bolts whereon they are carried.

Having thus described the invention, what is claimed is:—

In a scaffold for use on a window frame, a pair of supports; a platform adjustably assembled with the supports whereby the supports may be adjusted transversely with respect to each other; a longitudinally extensible brace terminally assembled with the supports and of the same height as the supports, whereby when a sash is closed down on the supports, the brace will constitute a closure for the space between the sash and the sill; frame-engaging members projecting laterally from the supports; and means for connecting the frame-engaging members for adjustment longitudinally of the supports, thereby permitting a longitudinal adjustment of the supports, to enable the brace to be alined vertically with the sash.

In testimony that I claim the foregoing as my own, I have hereto affixed my signature in the presence of two witnesses.

TIMOTHY S. THORN.

Witnesses:
STEPHEN O. STAATS,
SARAH L. STAATS.