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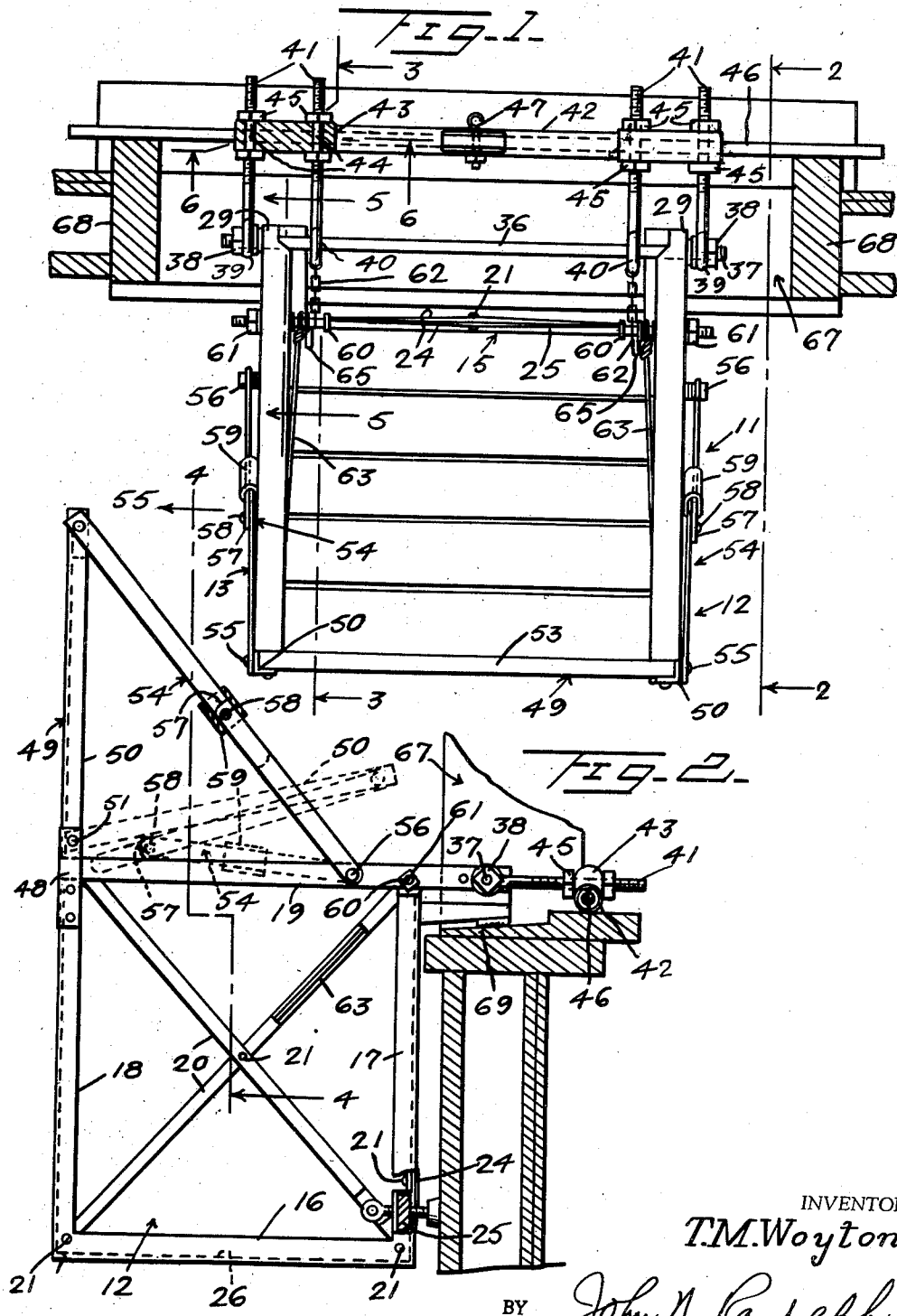
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WINDOW SERVICING PLATFORM

Filed June 28, 1957

2 Sheets-Sheet 1



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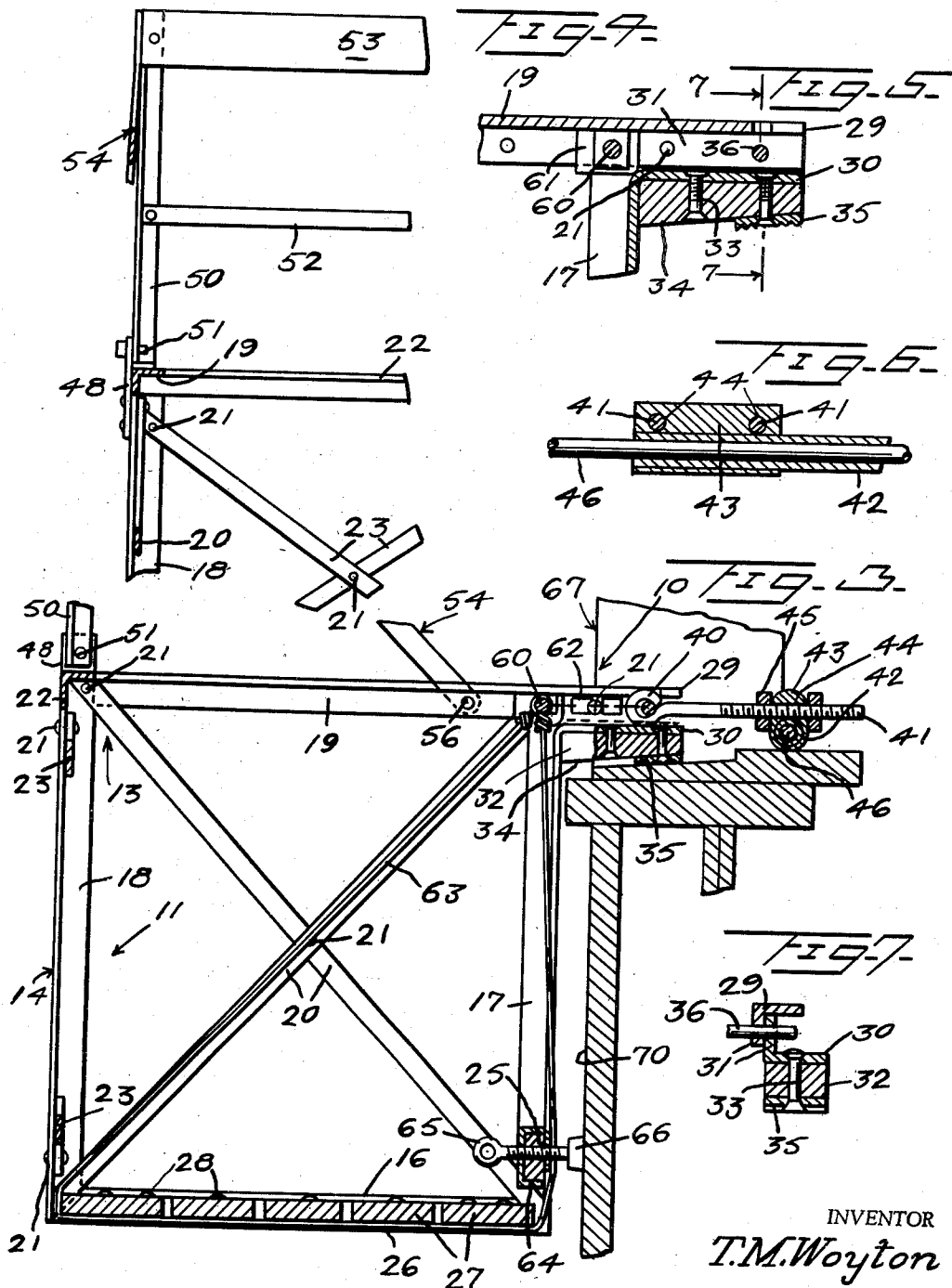
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WINDOW SERVICING PLATFORM

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1 Claim. (Cl. 304—27)

This invention relates to a novel platform and supporting cage structure which may be readily applied to and suspended from the outer side of a window for conveniently and safely supporting a workman engaged in various window servicing operations, such as painting, calking, replacing glass or making general repairs, all of which operations can be accomplished without risk through use of the servicing platform.

More particularly, it is an aim of the present invention to provide a platform structure which may be readily positioned on the outer side of a window, from the inner side thereof without risk of the platform structure being dropped out of the window while being applied thereto, and which includes readily adjustable parts for adapting the platform to window frames and sills of different thicknesses and different overhangs, so that the platform can be securely mounted and braced to be disposed rigidly relative to the window.

A further object of the invention is to provide a window suspended supporting structure having a novel safety feature to prevent release of the suspended supporting structure from the window should a breakage occur in the device.

Various other objects and advantages of the invention will hereinafter become more fully apparent from the following description of the drawings, illustrating a presently preferred embodiment thereof, and wherein:

Figure 1 is a top plan view, partly in horizontal section, showing a window servicing platform in an applied position;

Figure 2 is a side elevational view of the platform structure, partly in section, taken substantially along a plane as indicated by the line 2—2 of Figure 1;

Figure 3 is an enlarged fragmentary vertical sectional view, taken substantially along a plane as indicated by the line 3—3 of Figure 1;

Figure 4 is a fragmentary transverse vertical sectional view, taken substantially along a plane as indicated by the line 4—4 of Figure 2;

Figures 5 and 6 are enlarged fragmentary sectional views, taken substantially along planes as indicated by the lines 5—5 and 6—6, respectively, of Figure 1, and

Figure 7 is a cross sectional view, taken substantially along a plane as indicated by the line 7—7 of Figure 5.

Referring more specifically to the drawings, a window servicing platform in its entirety is designated generally 10 and includes a frame, designated generally 11, having corresponding sides 12 and 13, a back 14 and a front 15.

Each of the sides 12 and 13 includes a bottom member 16, a front post 17, a rear post 18 and a top bar 19. The lower ends of the posts 17 and 18 are secured to the ends of the bottom member 16 and the upper ends of said posts 17 and 18 are secured to the top bar 19. Each side 12 and 13 also includes a pair of cross braces 20 which are secured together intermediate of their ends and which are secured at the corners of the frame by fastenings 21.

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The back 14 of the frame 11 includes a top rail 22 which is secured to the upper rear corners of the sides 12 and 13 and a pair of cross braces 23 which are secured to the rear corner post 18 by additional fastenings 21, as seen in Figures 3 and 4.

The front 15 of the frame includes cross braces 24 which are secured together intermediate of their ends, and the ends of which are secured to the front uprights 17, by additional fastenings 21. The frame front 15 also includes a lower cross piece 25 which is preferably formed of wood and which is secured at its ends to the front posts 17.

The frame parts 16, 17, 18, 19 and 22 are preferably formed of angle iron, as illustrated, and the bottom members 16 each includes an inwardly extending bottom flange 26. The frame 11 is provided with a flooring formed of a plurality of planks 27 which extend between the bottom members 16 and which have their ends resting upon the inwardly extending flanges 26 and secured thereto by fastenings 28.

As best seen in Figures 3 and 5, the top bars 19 have extensions 29 which project forwardly from the front posts 17. In addition, the front posts 17 have forwardly turned extensions 30 at their upper ends which interfit with the extensions 29 to provide forwardly extending frame arms of inwardly opening channel shaped construction, as seen in Figure 7, and which frame arms 29, 30 have two-ply reinforced intermediate portions 31 formed by the overlapping vertical flanges of the extensions 29 and 30. Elongated blocks or strips of wood 32 are secured to the undersides of the arms 29, 30 by fastenings 33. Each bar or block 32 has an inclined underside 34, the inclination of which is adapted to correspond with the conventional pitch of a window sill. A plate 35 having a toothed bottom surface is secured to the underside 34 of each block 32 by one of the fastenings 33.

A rod 36 extends between the outer ends of the arms 29 and through the two-ply portions 31 thereof. Said rod 36 has threaded ends 37 engaged by nuts 38, which are disposed outwardly with respect to the arms 29, 30. Eyebolts 39 engage the rod 36 between the nuts 38 and the outer ends of the arms 29, 30. A second pair of eyebolts 40 are mounted on the rod 36 between and adjacent the arms 29, 30. The bolts 39 and 40 have threaded shanks 41 projecting from the eyes thereof. A tube 42 has upstanding enlargements 43 at each end thereof and each of which is provided with two transverse bores 44 to slidably receive the threaded shank of a bolt 39 and an adjacent bolt 40. Said shanks 41 each carry a pair of nuts 45 which straddle and bear against opposite sides of the enlargements 43, for adjustably securing the bolt shanks to said tube portions 43. An intermediate portion of a rod 46 is detachably secured in the tube 42 by a nut and bolt fastening 47 which extends through the tube and rod.

Metal strap members 48 are secured to and extend upwardly from the outer sides of the rear corner posts 18. An outer or rear guard member, designated generally 49, includes a pair of posts 50 having lower ends which are pivotally connected at 51 to the strap members 48, above the top bars 19. The rear guard member 49 also includes guard rails 52 and 53 which extend between and are secured at their ends to the posts 50 and which are vertically spaced from one another, as best seen in Figure 4.

Braces 54 have upper ends which are pivotally connected at 55 to the upper ends of the posts 50 and lower ends which are pivotally connected at 56 to the top bars 19, near the inner or front side of the frame 11. Each brace 54 is formed of end sections having adjacent overlapping ends 57 which are pivotally connected together

at 58. A sleeve or collar 59 is slidably mounted on each brace 54 and is slidably movable into a position over the overlapping ends 57 of the brace sections and the pivot 58 thereof to maintain the brace 54 in an extended position as seen in Figures 1 and 2. The sleeves or collars 59 have a frictional engagement with the overlapping ends 57 so that said sleeves must be forcibly moved out of engagement therewith to permit folding of the braces and so that the guard member 49 can be swung downwardly and forwardly to a folded position against the top of the frame 11.

Bolts 60 extend through the top bars 19 immediately above the front corner posts 17. Each bolt 60 carries two nuts 61, which nuts engaged opposite sides of the bar 19. The headed ends of the bolts 60 extend inwardly from the top bars 19. Chains 62 connect the bolts 60 to the eyes of the inner bolts 40, which are disposed adjacent thereto, as seen in Figures 1 and 3. The ends of a strong wire 63 are secured to each bolt 60. Each wire 63 extends downwardly from the bolt 60 to which it is secured on the inner side of the adjacent front corner post 17, around the outer or front side of the front frame member 25, along the under side of the flooring 27, and thence diagonally upwardly and forwardly from the outer or back edge of the flooring 27 back to the bolt 60, as best illustrated in Figure 3.

The front piece 25, near the ends thereof, has metal strips 64 wrapped therearound, as best seen in Figure 3. Screws 65 extend forwardly through and are threadedly mounted in said strips 64 and the frame member 25. Cap members 66 are swivelly connected to the forward ends of the screws 65.

It will be readily apparent that if the guard member 49 is folded down against the top of the frame 11, that said frame can be readily passed outwardly through the lower part of a window frame 67 when the bottom sash of the window, not shown, is in an open position. Before the frame 11 is displaced outwardly through the window frame 67, the rod 46 is secured in the tube 42, as shown in Figure 1. The rod 46 is of a length substantially greater than the spacing between the sides 68 of the window frame 67, so that the end portions of the rod 46 will engage the inner edges of the sides 68 of the frame 67. The frame 11 can then be inserted outwardly through the window opening 67 without risk of the frame 11 being released to drop. The nuts 45 can then be adjusted on the bolt shanks 41 to position the frame 11 with the front corner posts 17 spaced slightly from the outer edge of the window sill 69, so that the ribbed undersides of the plates 35 will rest flush upon portions of the upper side of the window sill 69. The guard 50 is then swung upwardly to an upright position and the sleeves 59 are moved to positions over pivots 58 to maintain the braces 54 in extended positions. The operator or workman can then safely climb through the window frame 67 into the window servicing platform 11 and while standing on the flooring 27 can adjust the screws 65 so that when the caps 66 are abutting the

outer side of the wall 70, the corner posts 17 and 18 will be disposed substantially vertical. The frame 11 will provide a guard around the lower portion of the body of the workman while standing on the flooring 27, and the guard 50 and braces 54 will provide a guard for the upper portion of the body of the workman. Thus, the workman may be supported with the maximum of safety within the platform structure 10 while performing various work on the outer side of a window, such as replacing glass, repairing or painting the window, or washing the window.

The wires 63, bolts 60, chains 62 and bolts 40 provide a direct connection between the flooring 27 and the tube 42 and rod 46, so that should a break occur in any part of the frame 11, the flooring 27 would still be effectively supported from the window frame 67 for safely supporting the occupant of the platform.

Various modifications and changes are contemplated and may be resorted to, without departing from the function or scope of the invention as hereinafter defined by the appended claim.

I claim as my invention:

A window servicing platform comprising a box-like frame having an open top and including inner and outer corner posts and diagonal braces extending between and connected to said corner posts, said frame including bottom members each extending between and connected to an inner and an outer corner post, a floor supported by said bottom members, top bars each secured to an inner and an outer corner post, said top bars having extensions projecting inwardly from said inner corner posts, sill engaging members secured to the undersides of said extensions and having inclined undersides adapted to rest flush on the upper surface of a window sill of a window frame into the outer side of which said extensions project, a rod extending between and through said extensions, a plurality of eyebolts mounted on said rod and having threaded shanks extending inwardly therefrom, and a window frame engaging member having an intermediate portion to which said threaded shanks are connected and end portions adapted to bear against the inner edges of the upright sides of the window frame for supporting said window servicing platform frame and flooring on the outer side of the window frame.

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