

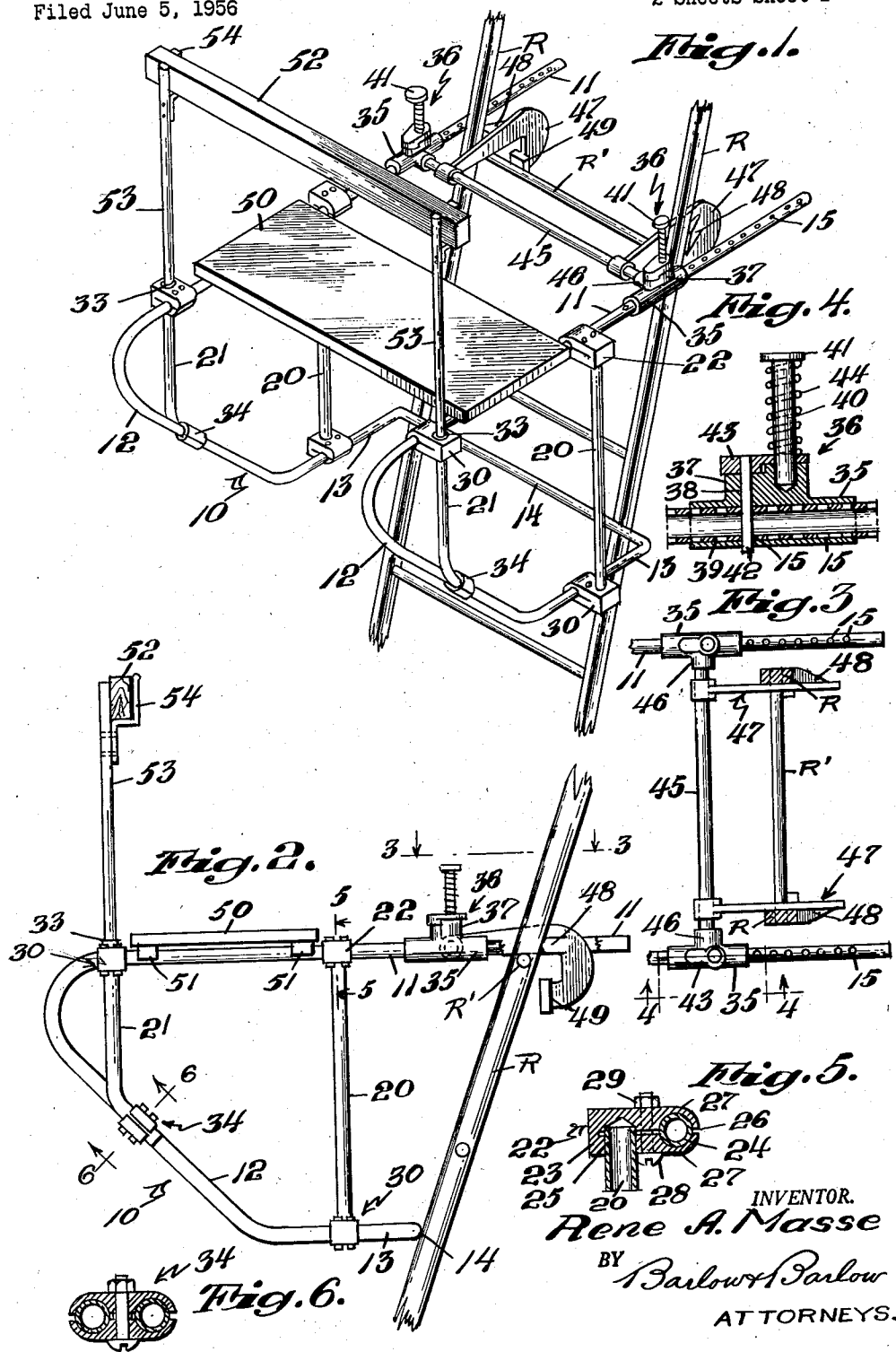
June 10, 1958

R. A. MASSE
PORTABLE SCAFFOLD

2,838,342

Filed June 5, 1956

2 Sheets-Sheet 1



INVENTOR.
Rene A. Masse
BY *Barlow & Barlow*
ATTORNEYS.

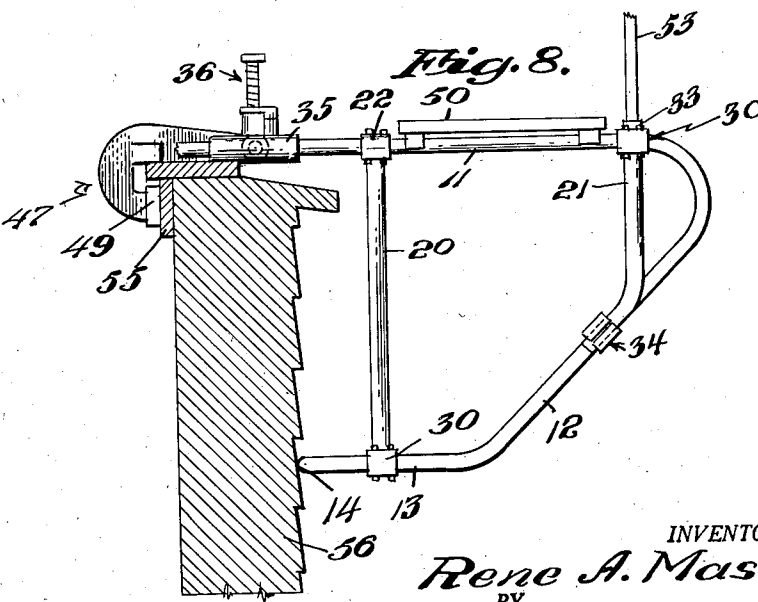
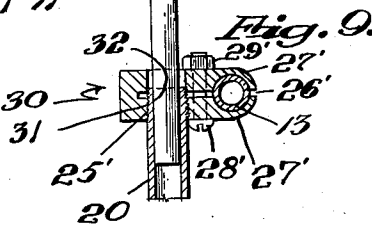
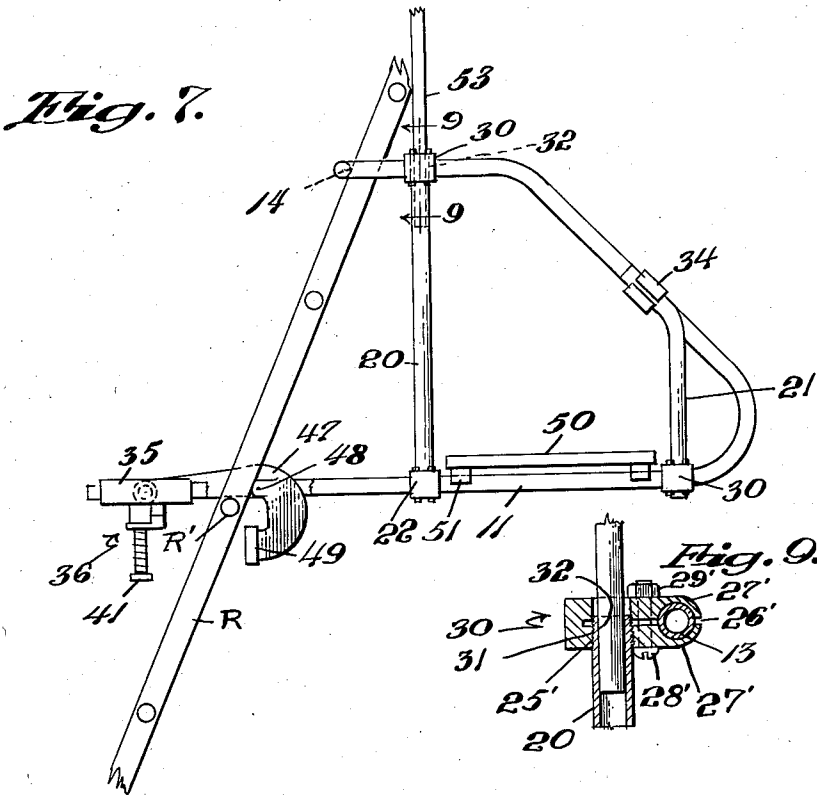
June 10, 1958

R. A. MASSE
PORTABLE SCAFFOLD

2,838,342

Filed June 5, 1956

2 Sheets-Sheet 2



INVENTOR.
Rene A. Masse
BY
Barlow & Barlow
ATTORNEYS.

1

2,838,342

PORTABLE SCAFFOLD

Rene A. Masse, Hackensack, N. J.

Application June 5, 1956, Serial No. 589,433

1 Claim. (Cl. 304—31.5)

The invention is an improvement in a portable scaffolding device disclosed in Patent No. 2,678,243, issued May 11, 1954.

The device disclosed in the above patent comprised a frame section and a hook section slidably related to each other. When attaching the device on a ladder, it is necessary to pass the hook legs section over a rung of the ladder from the rear thereof and to assemble the frame section to the leg section from the front of the ladder.

An object of this invention is to provide a device of the above character so constructed as to be attached as a unit to a ladder.

Another object of the invention is to provide a device of the above character so constructed as to adapt the same for use on either side of the ladder.

Another object of the invention is to provide a device of the above character so constructed that it may be swung from the front of the ladder to the back of the ladder.

With these and other objects in view, the invention consists of certain novel features of construction as will be more fully described and particularly pointed out in the appended claim.

In the accompanying drawings:

Figure 1 is a perspective view showing a device embodying the invention and attached to a ladder;

Figure 2 is a side elevational view partially broken away to better illustrate the hook legs engaged with the upright of the ladder;

Figure 3 is a top plan view of a fragmentary portion of the device looking in the direction of the arrows on line 3—3 of Figure 2;

Figure 4 is a sectional view taken substantially along line 4—4 of Figure 3;

Figures 5 and 6 are sectional views taken substantially along lines 5—5 and 6—6, respectively of Figure 2;

Figure 7 is a side elevational view showing the device attached to the ladder in a manner so as to position the frame of the device on the opposite side of the ladder from that shown in Figure 2;

Figure 8 is a side elevational view of the device shown attached to a window frame; and

Figure 9 is a sectional view taken substantially along line 9—9 of Figure 7.

The scaffold device of the present embodiment comprises a frame 10 which is preferably made of a continuous length of rod or tubing which is bent into a form so as to provide a pair of parallel arms 11 for horizontal disposition. Each arm 11 has a depending portion 12 which slants inwardly and is connected to an arm 13 which extends parallel to arm 11. These arm portions 13 are connected to each other by a bridge 14 for horizontal disposition.

The frame is reinforced with braces 20 and 21 which extend between arms 11 and 13. The braces 20 are secured to the arms 11 by clamp fastening 22 (see Figure 5). These are similar to each other and comprise a generally rectangular block 23 having an opening 24

2

therethrough extending longitudinally of the block and an opening 25 extending partially therethrough from the lower side of the block and at right angles to the axis of opening 24. A slot 26 extends inwardly from one edge of the block across the opening 24 lengthwise thereof and across opening 25 crosswise thereof. This provides oppositely disposed resilient portion 27. The arm 11 is slidably received through opening 24, and the adjacent terminal end of brace 20 is received in opening 25 to bottom therein. A clamp bolt 28 extends through the portions 27 and is engaged by a nut 29 so as to draw the portion 27 into firm engagement with the arm 11 in the known manner. It will be seen referring to Figure 5 that the end of brace 20 extends across slot 26 and drawing the portions 27 against arm 11 will also cause the wall of opening 25 to bind against the brace 20 and secure the same in place.

The other or lower end of brace 20 is secured to the arm 13 by means of a clamp 30 (see Figure 9) which is similar to clamp 22 with the exception of opening 25' which is made to extend through the clamp block. The opening 25' is screw threaded as at 31 and threadedly receives the adjacent end of brace 20. It will be seen in this Figure 9 that a portion of opening 25' and the brace 20 forms a socket 32 for a purpose which will hereinafter appear.

The upper end of braces 21 are similarly secured to the arm 11 by means of a clamp fastening 30 which likewise provides a socket 33 for a purpose which will hereinafter appear. The lower end portion of brace 21 is bent to extend parallel to the slant of arm portion 12 and is firmly secured thereto by a clamp fastening 34 constructed as shown in Figure 6.

A pair of slidable members or sleeves 35 are slidably received on the arms 11 and secured in adjusted position thereon by means of a locking mechanism designated generally 36 (see Figure 4). The sleeve is provided with boss 37 having an opening 38 therethrough which extends diametrically across the bore 39 of the sleeve and through the wall thereof. A short rod 40 is secured to the boss 37 to be held stationary and to extend outwardly radially with reference to the bore 39 and is provided with an enlarged head 41. A lockpin 42 extends through the opening 38 and is provided with an enlarged flat head 43 which is apertured to receive the rod 40 and having a sliding relation thereon. A compression spring 44 surrounds the rod 40 and one end thereof engages against the head 43 and the other end of the spring abuts against the head 41. Thus, the spring tends to bias the pin 38 to its locked relation. The end portions of arms 11 are each provided with a plurality of equally spaced openings 15 which extend diametrically through the arms and these openings 15 and opening 38 may be moved into registry so that the lock pin will extend through such opening 15 and thus secure the arms 11 and sleeves against relative axial movement. In order to disengage the pin 38 from the locked position, the head 43 is moved upwardly along the rod 40 against the pressure of spring 44 a distance sufficient to clear the pin from openings 15. The arm 11 may be withdrawn entirely from the sleeve 35, or the arm 11 may be slid along the sleeve to register such opening 15 with opening 38 so as to provide the adjustment desired. Upon releasing head 43, the spring will return the pin 42 through registering openings to locked relation.

The sleeves 35 are connected to each other by a cross member or brace 45 which may be a solid rod or tubular material. The sleeves each have an apertured boss 46 which receives the ends of brace 45 and secured thereon in an appropriate manner, as by way of example, friction engagement therewith. A pair of legs 47 are slidably mounted on brace 45 and are free to swing thereon. The

3

members are similar, and each has an outwardly extending projection or abutment 48 and terminates in a curvature or hook formation having a rectangular shaped pad 49 secured thereto.

In mounting the device on a ladder so as to provide a work platform at the front of the ladder which may be at the upper end portion thereof, the leg members 47 are slid inwardly toward each other along the brace 45 so as to permit passing the same over a rung R' and between the uprights or rail R of the ladder. The leg members 47 may now be slid outwardly along the brace or cross member 45 so as to contact the inside of the rails and position the projection 48 to engage the rear side of the ladder rail, as shown in several views of the drawing.

The bridge 14 will engage against the front side of the ladder rails. The weight of the device being located at the front of the ladder will tend to cause the frame to swing about the bridge 14 as a fulcrum and provide a jamming action on said rails between the rails and the bridge 14 and projections 48 to firmly hold the device in place. The work platform 50 may now be placed in position on the arms 11, as shown in Figures 1 and 2, and detachably secured thereto by spring clips 51 secured to the under side of the platform. A safety rail 52 is provided, and this is supported on post 53 which is frictionally received in sockets 33 to extend therein a distance sufficient to be retained in secure position. The upper end of each post is provided with a bracket 54 in which is received the rail 52. Thus, the scaffold positioned at the front of the ladder provides for the worker to reach areas above the ladder.

In Figure 7 I have shown the device when in use on the back or rear side of the ladder. To mount the same on the ladder as shown in this Figure 7, the device is first attached to the front of the ladder, as above described. Prior to adding the railing posts and platform, the frame 10 is swung upwardly about the axis of cross member 45, thus swinging the sides 12 on either side of the ladder to the back side of the ladder rail in inverted position with the bridge 14 engaging against the front of the rails at a location above the brace or cross member 45. The frame section may be adjusted to position the arms 11 horizontally. The platform may now be attached to the arms 11 and the scaffold is ready for use, the jamming action being substantially the same as above described. In both cases (Figure 1 and Figure 7) the arms 47 prevent sliding of the device downwardly of the ladder.

It will be apparent that the device may be employed in the fashion of a so-called ladder jack by using two ladders (not shown) and attaching a device to each ladder

4

similarly as shown in Figure 7. A plank or the like (not shown) may be extended to rest on each platform 50. With the frame section 11 in the inverted position of Figure 7, the socket 32 in the end of brace 20 will be spaced from the building against which the ladders lean. The posts 53 may be inserted into sockets 32 in brace 20 and a long two by four piece of lumber (not shown) may be inserted into the brackets 54 so as to span the space between ladders and provide the safety rail.

In Figure 8 I have shown the device as used in connection with a window opening. In this relation the hook element 47 will be positioned for the pad 49 to engage against the inner frame 55 of the window and the bridge 14 to engage against the outer wall 56 of the building, as shown. The platform 50 and safety rail may be next attached in place. The weight of the scaffold will act to pivot about pad 49, jamming bridge 14 against wall 56, in a manner similar to that above described to secure the device in position.

I claim:

A portable scaffold comprising a frame section including a pair of parallel arms for horizontal disposition, a slidable member received on each of said arms, a cross member connecting said slidable members, a pair of legs mounted on said cross member for axial movement thereon and for swinging movement relative thereto, said legs extending from said cross member and adapted to be passed between the rails of an inclined ladder above a rung thereof and slidable axially of said cross member to engage against the inner side of said rails, abutments extending laterally outwardly from said legs to engage the rear side of said rails, said abutments being fixed to said legs to be held stationary therewith means including a horizontal extending bridge connected to said arms, said bridge extending at a position beneath said arms so as to engage against the front side of said rail, said frame extending outwardly of said rails whereby the weight of said scaffold will tend to rock said frame about said points of engagement with said rail to support said scaffold by the jamming engagement at said bridge and abutments with said ladder rails.

References Cited in the file of this patent

UNITED STATES PATENTS

480,991	Boettcher	Aug. 16, 1892
1,059,287	Dybeck	Apr. 15, 1913
1,187,084	Oberti	June 13, 1916
2,678,243	Masse	May 11, 1954