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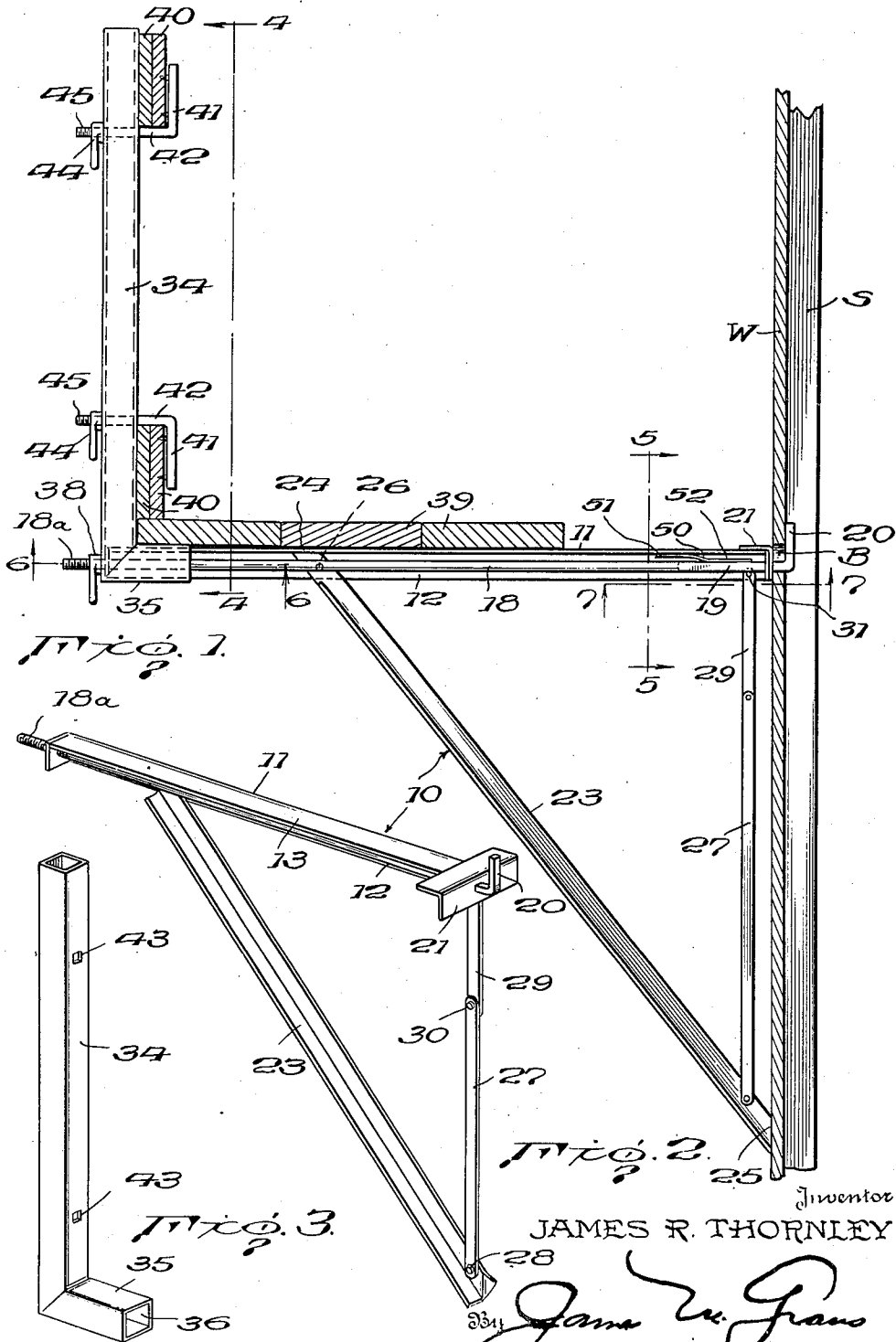
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2,332,477

WALL SCAFFOLD

Filed Feb. 6, 1942

2 Sheets-Sheet 1



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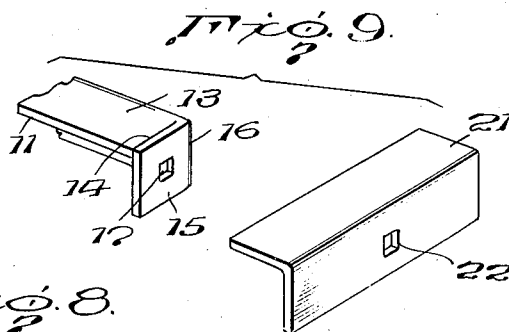
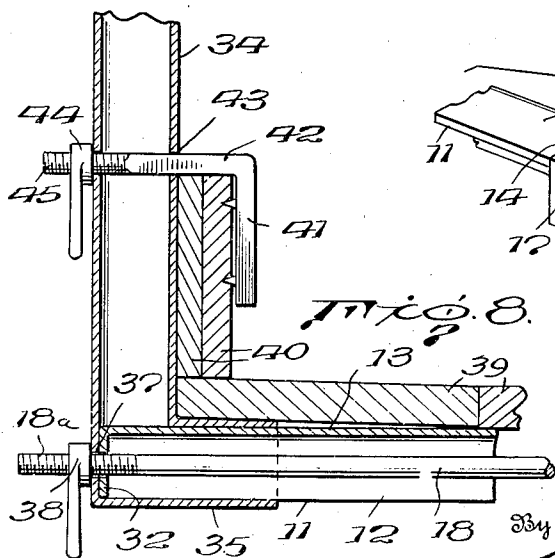
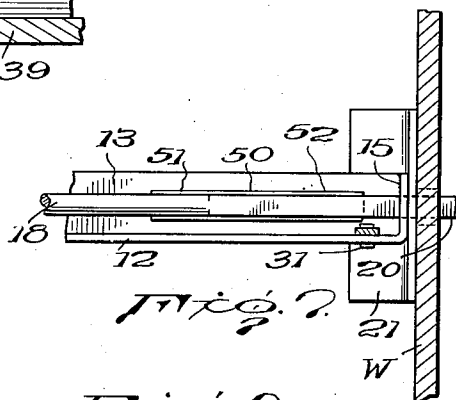
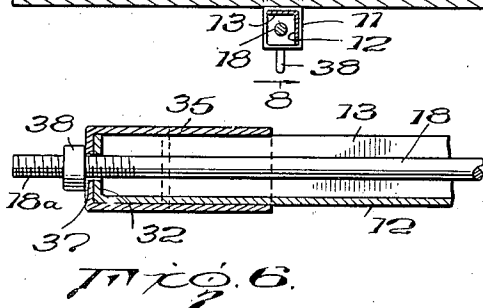
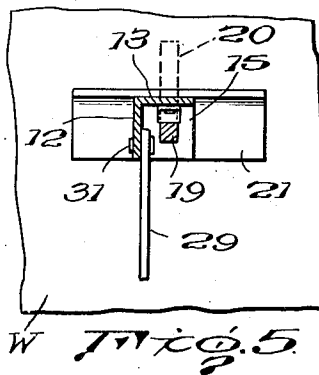
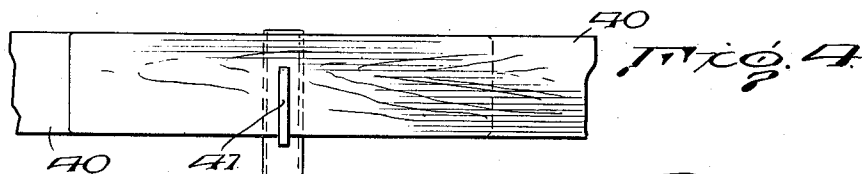
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WALL SCAFFOLD

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2 Sheets-Sheet 2



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WALL SCAFFOLD

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7 Claims. (Cl. 304-14)

The present invention relates to improvements in wall scaffolds.

The primary object of the invention is to provide a scaffold capable of being attached to a wall or other supporting surface to provide a safe and rigid structure which will not pull away from the wall under strains and stresses and thereby cause serious accidents to workmen during construction operations.

A further object of the invention is to provide a scaffold of the above mentioned character capable of being erected by one man, thereby eliminating the necessity of employing large numbers of workmen on construction jobs of a relatively simple nature.

A still further object of the invention is to provide a scaffold jack adapted to be attached to a wall for supporting a scaffold runway or platform which may be assembled and knocked down in a minimum amount of time and which may be compacted to facilitate easy transportation during transit from one construction job to another.

A still further object of the invention is to provide a guard rail for a scaffold structure of the above mentioned character which is capable of being assembled relative to the scaffold jack in a unique manner to prevent workmen and material from sliding or slipping off of the scaffold platform and causing serious damage to both life and material.

A still further object of the invention is to provide a scaffold of the above mentioned character which may be easily attached to a wall surface such as planking or studding of a building construction in a minimum amount of time and affording a structure of maximum strength.

Other objects and advantages of the invention will become apparent during the following description of the accompanying drawings wherein:

Figure 1 is a vertical side elevational view of the scaffold jack and guard rail illustrating in detail the manner in which the same is attached to and supported by a wall;

Figure 2 is a perspective view of the scaffold jack showing the same in position prior to its attachment to a wall surface and showing the manner in which the strut is extended and held in position;

Figure 3 is a perspective view of one of the guard rail supporting posts illustrating in detail the construction thereof;

Figure 4 is a vertical cross sectional view taken on line 4-4 of Figure 1 looking in the direction of the arrows and illustrating the manner in

which the guard rails are anchored to the rail posts;

Figure 5 is a vertical cross sectional view taken on line 5-5 of Figure 1 looking in the direction of the arrows and showing a wall abutting member attached to one of the plank supporting beams of the scaffold;

Figure 6 is a horizontal cross sectional view taken on line 6-6 of Figure 1 looking in the direction of the arrows and illustrating in detail the connection between the anchoring rod and guard rail post;

Figure 7 is a horizontal cross sectional view taken on line 7-7 of Figure 1 showing the manner in which the planking supporting beam is attached to a wall surface;

Figure 8 is a vertical cross sectional view taken on line 8-8 of Figure 4 showing in detail the connection between one of the guard rails and further illustrating the connection between the planking and supporting beam and one of the vertical guard rail posts and,

Figure 9 is a perspective view showing the wall abutting member in exploded relationship with the inner end of one of the planking supporting beams.

In the drawings, wherein for the purpose of illustrating the invention and wherein like reference characters will be employed to designate like parts throughout the same, the reference character 10 will generally be employed to designate a scaffold jack adapted to be attached to a wall surface W such as planking or siding supported by studding S.

The scaffold jack 10 comprises a platform supporting beam 11 formed of a length of angle iron providing walls 12 and 13 at right angles to each other. The inner end of the beam 11 has one of its walls cut away as at 14 to provide an end portion 15 bent as at 16. The end portion 15 is provided with a square opening 17 for allowing the passage of an anchoring rod 18 having one of its ends squared as at 19 and its extreme free end bent upwardly as at 20. The extreme free end projects through the square opening 17 in the end member 15 and is adapted to project through a bore hole B in the wall W as is shown clearly in Figure 1.

Interposed between the end member 15 and the wall surface W is a transverse angle plate 21 having a squared opening 22 corresponding in shape and dimensions to the squared opening 17 in the end member 15. The angle plate 21 may be welded or otherwise secured to the inner end of the beam 11 so that the angle plate 21 will en-

gage the wall surface and prevent side slipping or swinging of the free end of the beam.

Pivotaly secured to the side wall 12 of the platform supporting beam is a strut bar 23 formed of an angle iron having its ends beveled as at 24 and 25. The strut bar 23 is held in place by a suitable pivot pin 26 clearly shown in Figure 1.

Secured to the opposite end of the strut bar 23 is a link 27 pivoted to the strut bar at one end as at 28 and having its opposite end attached to a similar link 29 as at 30. The link 29 is pivoted as at 31 to the side wall 12 of the platform supporting beam adjacent the inner end to allow the strut 23 to be folded into parallel relationship with the beam 11. The link 29 is shorter than the link 27 to compensate for the difference in the total link length when the strut is folded during transit.

The extreme free end of the anchoring rod 18 is threaded as at 18a and extends through an angularly bent end wall 32 in the outer end of the platform supporting beam 11. The end wall 32 is formed as an extension of the top wall 13 of the angle beam 11 similar to the end wall 15 in abutting relationship with the angle plate 21.

Attached to the free end of the angle beam 11 is a tubular guard rails post 34 having an angular portion 35 at the lower end thereof providing a socket 36 for receiving the free end of the platform supporting beam 11. One end of the socket 36 is provided with an aperture 37 for allowing the projection of the screw threaded portion 18a of the anchoring rod 18 so that a wing nut 38 may be attached thereto to lock the beam 11 to the wall W and to lock the guard rail post 34 against displacement.

Suitable platform planking 39 may be supported by a series of the scaffold jacks 10 arranged in alignment along the side wall of a building being constructed or repaired. Guard rails 40 may be attached to the guard rail posts 34 and the overlapping portions or ends of the guard rails may be anchored to the guard rail posts by means of angular locking bolts 41 the shanks of which as at 42 are squared and are adapted to extend through squared openings 43 in the guard rail post 34 so that a locking wing nut 44 may be threaded on the free screw threaded ends 45 of the shanks 42.

In assembling the structure, to provide a wall supported scaffold, the scaffold jack 10 is first placed in position at a level at which work is to be done on the wall W. A series of such jacks may be attached to the wall in a horizontal plane to provide adequate supporting points for the platform planking 39. After the jacks are placed in position, the guard rail posts 34 may be secured thereto by attaching the same to the anchoring rods 18. When the scaffold jacks 10 and guard rail posts 34 are thus in position, the planking 39 and guard rails 40 may be attached to the scaffold jacks 10 and guard rails posts respectively.

The anchor rod 18 is frictionally retarded against longitudinal sliding movement by means of a leaf spring 50, having one of its ends as at 51, welded or otherwise attached to the underside of the platform beam 11. The free end 52 of the leaf spring is in sliding frictional engagement with the squared portion 19 of the anchor rod, so that when the beam 11 is tilted during assemblage, the hooked end 20 of the anchor rod will not pinch the fingers of the workmen while assembling or knocking down the scaffold.

It is to be understood, that the form of the invention herewith shown and described is to be taken as a preferred embodiment of the same and that various changes in the shape, size and arrangement of parts may be resorted to without departing from the spirit of the invention or the scope of the subjoined claims.

I claim:

1. A wall scaffold comprising a horizontal supporting beam, an anchor rod extending longitudinally of the beam having a hooked end for engaging a wall surface, a guard rail post having a socket portion and its lower end received on the supporting beam and held in place by the anchor rod and guard rails supported by said guard rail post.

2. A wall scaffold comprising a horizontal supporting beam adapted to be attached to a wall, a wall abutting member secured to said beam, an anchor rod extending longitudinally of the beam and supported thereby, a hooked end formed on the anchor rod adapted to interlock with the wall, a strut carried by the beam adapted to engage the wall at a point beneath the interlocking connection between the beam and wall and a guard rail post detachably secured to the opposite end of the beam and held in place by the anchor rod.

3. A wall scaffold comprising a platform supporting beam having a transverse wall abutting member, a strut pivoted to the beam for reinforcing and supporting the free end thereof, an anchor rod slidably carried by the beam having one of its ends projecting through the abutting member and through the wall in interlocking engagement therewith, a guard rail post detachably secured to the free end of the beam adapted to be held in place by the anchor rod and guard rails removably attached to the guard rail post.

4. A wall scaffold comprising a horizontal beam adapted to be attached to a vertical wall surface, a strut pivoted to the free end of the beam for supporting the same, links connecting the inner end of the beam to the strut to limit the movement of the strut, an anchor rod slidably carried by the beam having a hooked end adapted to engage and interlock with the vertical wall surface, a guard rail post removably secured to the free end of the beam adapted to be held in place by the anchor rod and guard rails clamped to the guard rail post.

5. A wall scaffold comprising a series of scaffold jacks adapted to be attached to a wall in horizontal alignment, each of said jacks comprising a horizontal beam having a wall abutting member at one end thereof, a wall engaging strut pivoted adjacent the free end of the beam, links limiting the swinging movement of the strut connected between the inner end of the beam and strut, an anchor rod having a hooked end slidably carried by the beam adapted to hook the wall surface from the inner side thereof, a guard rail post removably attached to the free end of each beam adapted to be held in place by the anchor rod and guard rails spanning the guard rail posts and adapted to be clamped thereto.

6. A wall scaffold comprising a series of scaffold jacks attached to a vertical wall surface in horizontal alignment, each jack comprising a horizontal beam having a wall abutting member at one end thereof, a strut for each beam pivoted adjacent the free end thereof, links connecting the beam and strut for limiting the swinging

movement thereof, an anchor rod extending longitudinally of and slidably carried by each beam, a guard rail post removably secured to the free end of each beam adapted to be held in position by the anchor rod and guard rails spanning the guard rail posts adapted to be clamped into locking engagement therewith.

7. A scaffold jack comprising a platform supporting beam of angular cross-section, an adjustable slide rod carried by the beam having a hooked end for engaging within an opening in a vertical wall surface, means preventing rota-

tion of said slide rod, means between said beam and said hooked end for preventing side slipping or swinging of the free end of the beam, a nut mounted on the threaded end of said rod to clamp said beam, side slipping preventing means and hooked end against the wall surface, a truss bar pivoted to the beam adjacent its free end and pivoted links connecting the truss bar and platform supporting beam to limit the swinging movement of the truss bar.

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