

Aug. 2, 1938.

R. A. UECKER ET AL

2,125,830

SCAFFOLD BRACKET

Filed Aug. 9, 1937

3 Sheets-Sheet 1

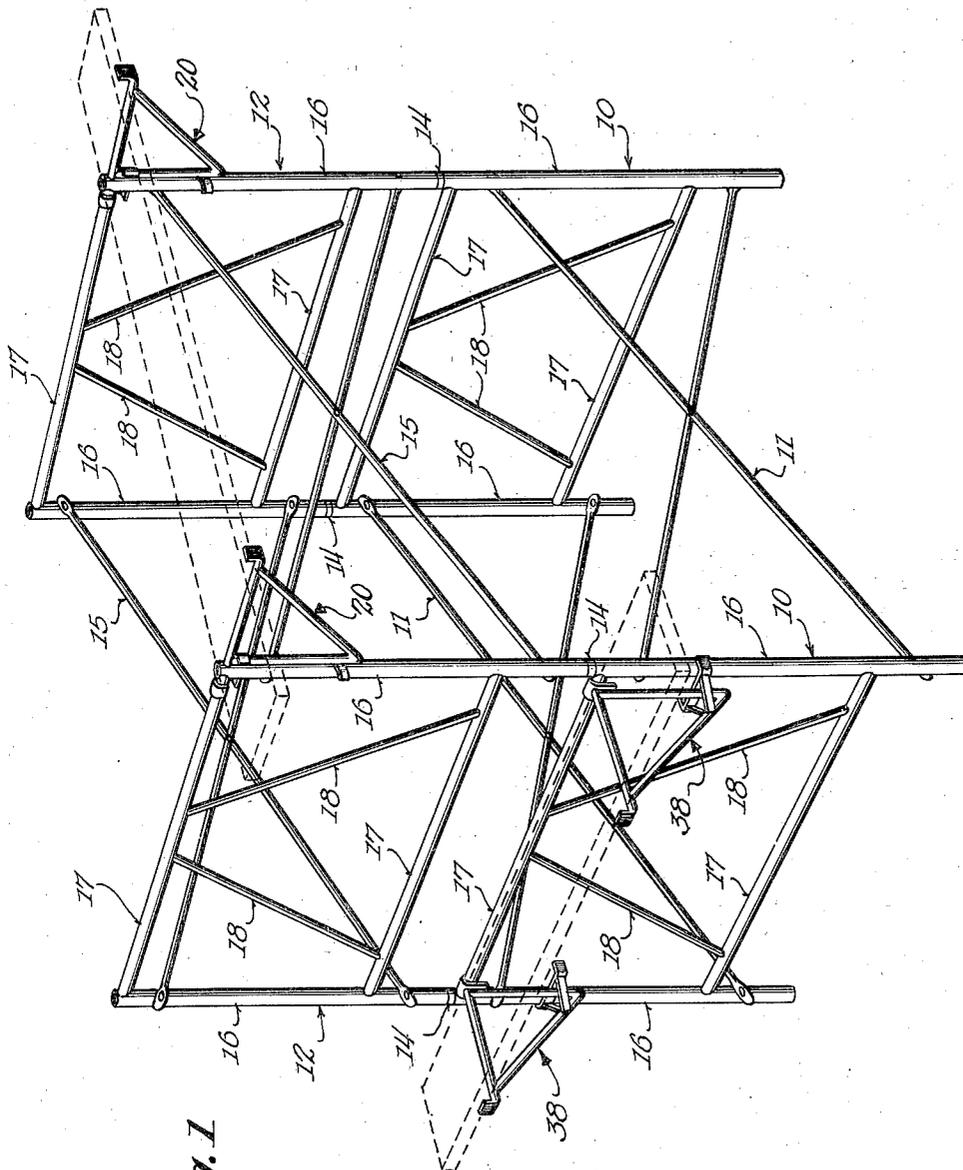


Fig. 1

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3 Sheets-Sheet 2

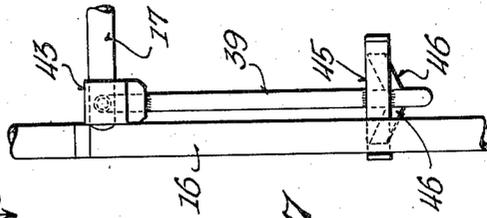
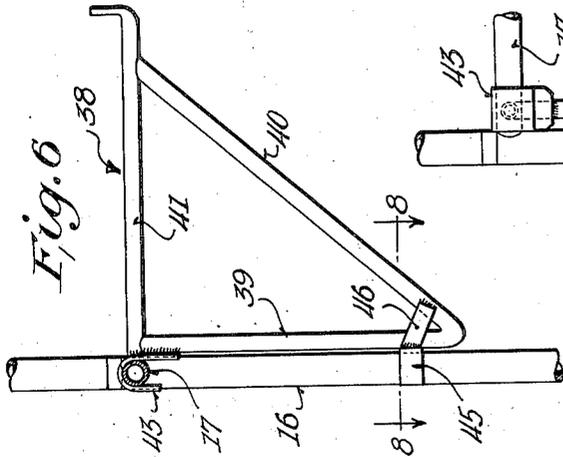


Fig. 7

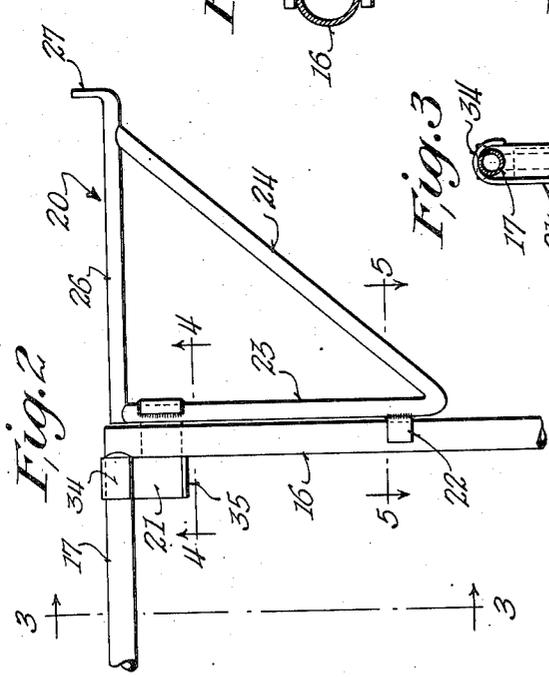


Fig. 5

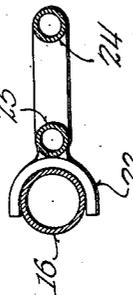


Fig. 8

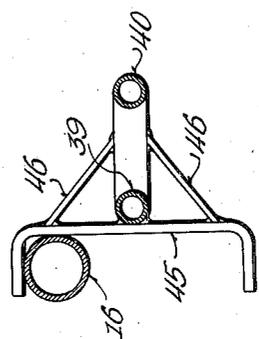


Fig. 3

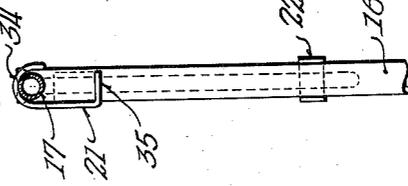
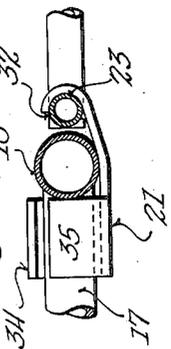


Fig. 4



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3 Sheets-Sheet 3

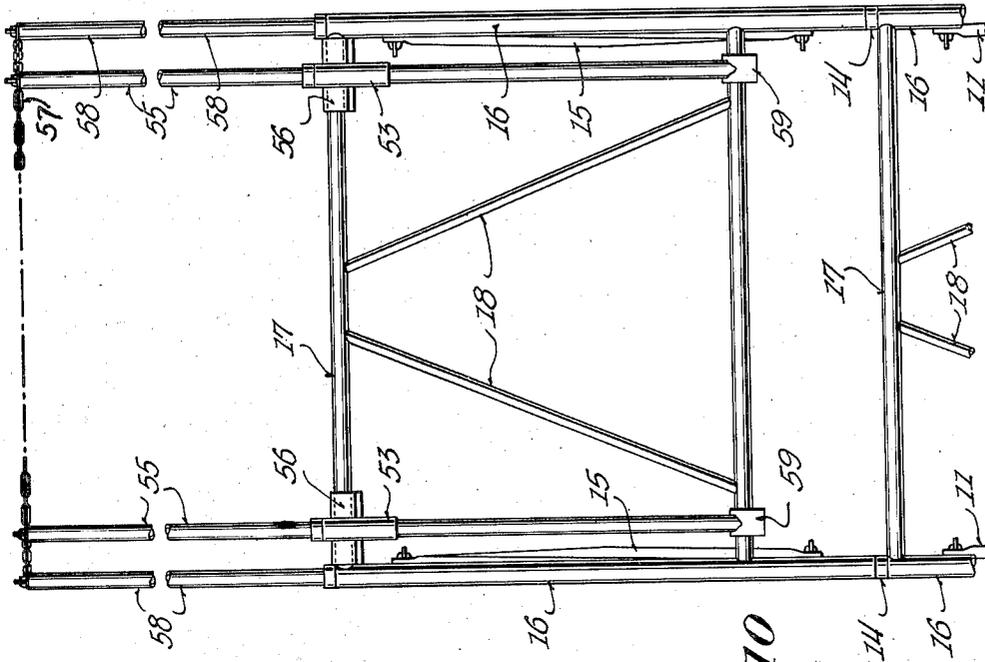


Fig. 10

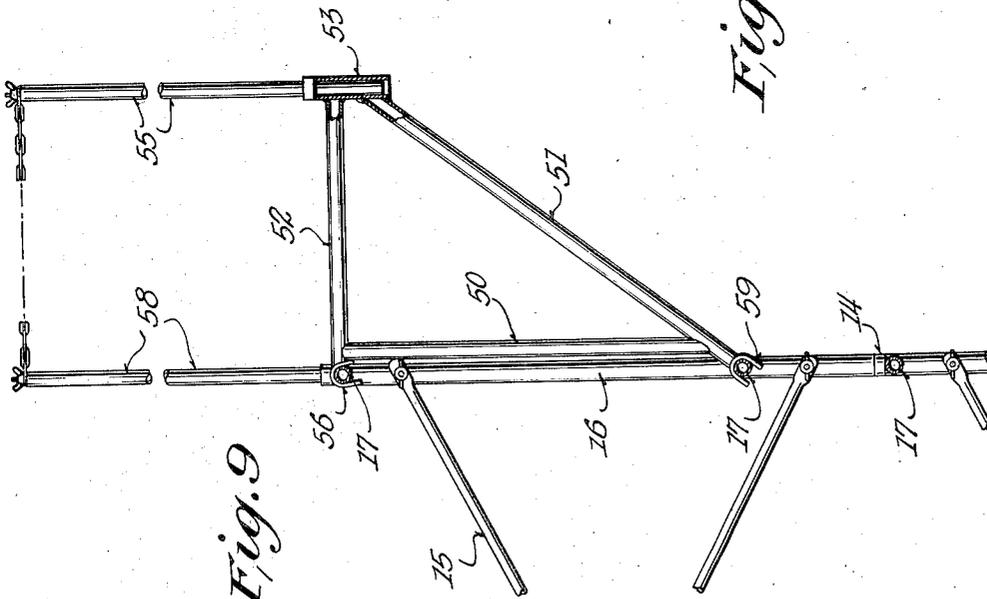


Fig. 9

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2,125,830

SCAFFOLD BRACKET

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Application August 9, 1937, Serial No. 158,106

6 Claims. (Cl. 304-2)

This invention relates to scaffolds and more particularly to brackets adapted to support planking on the exterior of a scaffold.

In order to make a scaffold rigid it is the usual practice to have a rectangular framework with members in a vertical plane on all four sides. Such a construction while satisfactory to workers on top of the scaffold is extremely awkward to a person working below the top of the scaffold.

One object of the present invention is, therefore, to devise a structure which will support scaffold planking on the exterior of a rectangular tower scaffold to enable the workers to work free of the encumbrances of the scaffold bracing.

A second object of the invention is to produce a bracket which may be attached to a tower scaffold at various elevations to support planking on the exterior of the scaffold.

Another object is to produce a bracket which may be used on the ends of the scaffold.

A further object of the invention is to improve the attaching means for scaffold brackets.

These and other objects, the nature of which will be apparent as the description progresses, are accomplished by means of the preferred forms of the invention shown on the drawings and described in the specification.

In the drawings:

Fig. 1 is a perspective view of a scaffold of the type shown and described in the United States patent to Reinhold A. Uecker, Number 2,043,498, issued June 9, 1936, showing the brackets, forming the subject matter of the present invention, attached thereto;

Fig. 2 is an enlarged side elevation of a side bracket;

Figs. 3, 4 and 5 are cross-sections on the lines 3-3, 4-4 and 5-5, respectively, of Fig. 2 looking in the direction of the arrows;

Fig. 6 is a side elevation of an end bracket made in accordance with the present invention;

Fig. 7 is an end elevation of the bracket shown in Fig. 6, looking from the left in Fig. 6;

Fig. 8 is a cross-section on the line 8-8 of Fig. 6 looking in the direction of the arrows;

Fig. 9 is a side elevational view of a scaffold with a modified form of end bracket attached thereto; and

Fig. 10 is an end view of the scaffold shown in Fig. 9 with the end bracket attached thereto.

Referring to the drawings, in which like numerals indicate like parts throughout the several views, the scaffold, which is of the type shown in the aforesaid Uecker patent, and which is best shown in Fig. 1, comprises a first pair of end

frames 10-10 which are held spaced from each other by a pair of cross braces 11-11. A second pair of end frames 12-12 are superimposed on the end frames 10-10 and are held aligned with the latter by four coupling pins 14. A second pair of cross braces 15-15 hold the end frames 12-12 in spaced upright position.

Each end frame 10-10 and 12-12 is made substantially rectangular and comprises vertical posts 16-16 joined by horizontal braces 17-17. One of the horizontal braces 17 connects the posts 16 adjacent the top while the other brace 17 connects the posts 16 at approximately the one third point on the posts.

Stiffeners 18-18 join the horizontal braces 17 to make the frames 10-12 rigid.

Three types of brackets are shown. The first type to be described is termed a side bracket as it fits on the side of the scaffold and lies substantially in the same plane as the end frame 10 or 12. The side bracket is shown best in Figs. 2, 3, 4 and 5, and comprises a triangular frame 20, which is connected to a horizontal brace 17 of the end frame 10 or 12 by a connecting fixture 21, and held in alignment with the frame by a support 22, so shaped as to guide the bracket into position on the post 16.

The frames 20 may be made of two pieces, a tubing bent to form a vertical leg 23 and a diagonal leg 24, and a second tubing 26 which forms a horizontal leg and joins the two legs 23 and 24. The tubing 26 may project beyond the leg 24. It terminates in a bent-up toe 27, the purpose of which is to retain the planking on the bracket.

The bracket is attached to the end frame 10 or 12 by means of an attaching fixture 21. The fixture 21 is made from a gusset plate which is welded to the vertical leg 23 of the bracket 20, as shown at 32, and extends in a plane substantially parallel to the plane of the bracket 20. The upper end of the gusset is bent across the plane of the bracket on a radius sufficient to fit over the horizontal brace 17 of the scaffold to form a hook 34 as best shown in Fig. 3.

The lower end of the gusset is provided with a heel 35 which is bent in, as shown in Figs. 3 and 4, to engage the vertical post 16 of the scaffold and prevent the upper end of the bracket from disengaging from the scaffold. Sufficient clearance is left between the heel 35 and the hook 34 to permit the insertion of the bracket over the brace 17.

The lower end of the bracket is held in engagement with the post 16 by the guiding support 22

which may be shaped to fit the post 16 and welded onto the lower end of the leg 23.

Figs. 6, 7 and 8 show an end bracket 38 the triangular frame of which is similar to the bracket 20 in Figs. 2 to 5 inclusive. The bracket 38 has legs 39, 40 and 41 which are similar to legs 23, 24 and 26 respectively, of the frame 20. An attaching fixture or gusset 43 is fixed onto the leg 39 substantially at right angles to the leg 41 and is bent back away from the frame in a semicircle of sufficiently large radius to fit over a brace 17 of the scaffold end frame 10 or 12 and support the bracket from the brace 17.

The fixture 43 fits over the brace 17 adjacent the post 16. As will be seen most clearly in Fig. 7, this construction necessitates the post lying outside the plane of the bracket. A guiding support 45 is formed on the lower end of the frame 38 to support the lower end of the bracket from the post 16. The support 45 is made to extend outwardly from the leg 39 of the frame 38 a sufficient distance to partly envelope the post 16. By having the support 45 extend outwardly from both sides of the leg 39, one bracket can be used for both sides of the end frame 10 or 12. This is mostly clearly illustrated in Fig. 1. Braces 46 reinforce the guiding supports 45 to give a more rigid structure.

A third type of bracket, used principally where a slightly wider bracket is required, is illustrated in Figs. 9 and 10.

Referring to Figs. 9 and 10 the bracket is shown as made of a vertical leg 50, a diagonal leg 51 and a horizontal leg 52. A tubular support 53 joins the legs 51 and 52 and forms a receptacle to receive a guard post 55.

The upper support for the bracket is formed from a semi-circular fixture or hook 56 which is similar to the fixture 43 of Fig. 6. The lower or guiding support 59 is formed from a semi-circular strip which is attached to the lower end of the diagonal leg 51 and engages over a lower horizontal scaffold brace 17.

A chain 57 joins the posts 55 and similar posts 58 on the top of the scaffold, as shown.

Having thus described the invention it will be realized that it is susceptible to various changes and modifications and it is not therefore, desired to limit the invention to the precise forms herein shown and described, but only by the scope of the appended claims.

What is claimed as new and desired to secure by Letters Patent is:

1. In a scaffold having a vertical post and a horizontal brace, a supporting bracket comprising, a frame, an attaching bracket fixed on the upper end of said frame, means on said attaching bracket engageable over said horizontal brace to support said frame from the brace with the upper end of the frame longitudinally aligned with the brace and means on the lower end of said frame engageable with said post to maintain the lower end of the bracket in position on said scaffold.

2. In a scaffold having a vertical post and a horizontal brace, a supporting bracket comprising, a frame, an attaching bracket fixed on the upper end of said frame, a hook formed on the

attaching bracket and extending laterally and engageable over the horizontal brace to support the frame from the brace with the upper end of the frame in substantially longitudinal alignment with said brace, and means on the lower end of said frame engageable with said post to prevent lateral movement of that end of the frame.

3. In a scaffold having a vertical post and a horizontal brace, a supporting bracket comprising, a frame, an attaching bracket fixed to the upper end of said frame, means on said attaching bracket engageable over said horizontal brace to support the frame from the brace with the upper end of the frame in approximate longitudinal alignment with said brace, means on said attaching bracket engageable with the post to prevent accidental disengagement of the overhang bracket from the scaffold, and means on the lower end of said frame engageable with said post to maintain that end of the frame in position on the scaffold.

4. In a scaffold having a vertical post and a horizontal brace, a supporting bracket comprising, a frame, an attaching bracket fixed to the upper end of said frame, a hook member formed on said attaching bracket extending laterally therefrom and engageable over the horizontal brace to support the frame from the brace, and a rearwardly opening channel shaped member fixed on the lower end of said frame engageable with a post thereby maintaining the frame in the general plane of the post and the brace.

5. In a scaffold having a horizontal brace and a vertical post, a supporting bracket comprising, a triangular frame including a vertical member, a horizontal member and a diagonal member, a supporting bracket fixed to said frame at the junction of the horizontal and vertical members and extending rearwardly in substantially the plane of the frame, a hook formed on one end of said bracket and engageable over the horizontal brace to support the frame therefrom with the horizontal member substantially aligned with the brace, and means on the vertical brace adjacent its juncture with the diagonal brace engageable with the post to maintain that end of the frame in position on the scaffold.

6. In a scaffold having a horizontal brace and a vertical post, a supporting bracket comprising, a triangular frame having a vertical member, a horizontal member and a diagonal member, an attaching bracket fixed to the upper end of said frame adjacent the junction of the horizontal and vertical members, a hook formed on said attaching bracket engageable over said horizontal brace to support the frame from the brace with the horizontal member thereof substantially aligned with the brace, means formed on said attaching bracket below said hook engageable with said post below said brace to prevent accidental disengagement of the supporting bracket, and means on the lower end of said frame engageable with the post to maintain the lower end of the frame in position on the scaffold.

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