

[54] SCAFFOLD DEVICE 3,653,462 4/1972 Courtney 182/108
2,198,960 4/1940 Deck 182/150
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2,722,360 11/1955 Malm 182/108

[22] Filed: June 20, 1972 Primary Examiner—Heinaldo P. Machado
[21] Appl. No.: 264,599 Attorney—Jack N. McCarthy

Related U.S. Application Data
[63] Continuation-in-part of Ser. No. 114,135, Feb. 10, 1971, abandoned.
[52] U.S. Cl. 182/150
[51] Int. Cl. E04g 3/10
[58] Field of Search 182/150, 107, 108

[56] References Cited
UNITED STATES PATENTS
3,158,223 11/1964 Brown 182/150

[57] ABSTRACT
A scaffold device having an upper portion formed of hook shape with a foot means for engaging an overhang of a structure, said foot means having a wedge-shaped cross section, and a lower portion mounted with respect to said upper portion for supporting plank means thereon, said lower portion having bumper means for engaging the side of a structure and means for restricting movement of the plank means.

8 Claims, 6 Drawing Figures

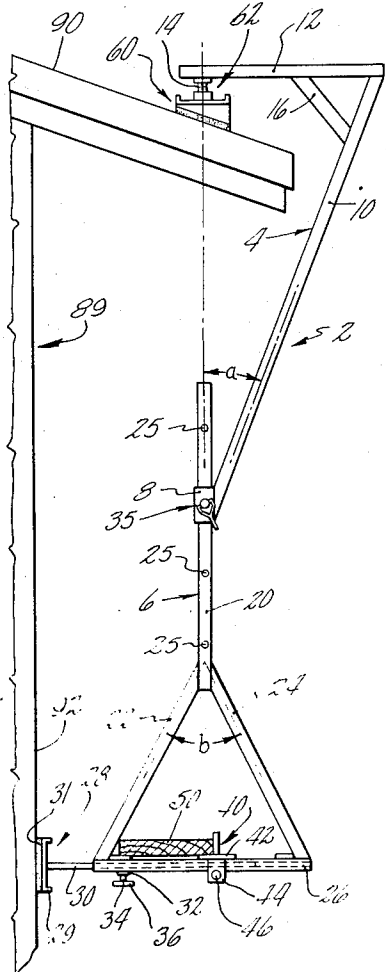


FIG. 1

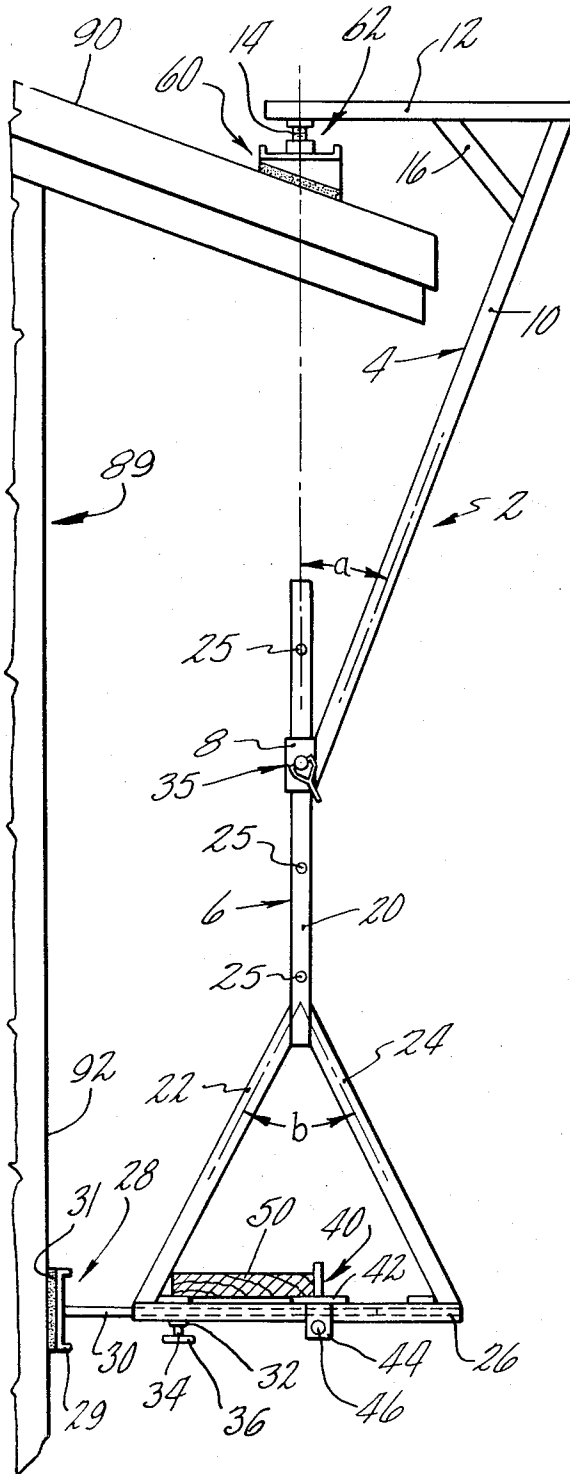


FIG. 2

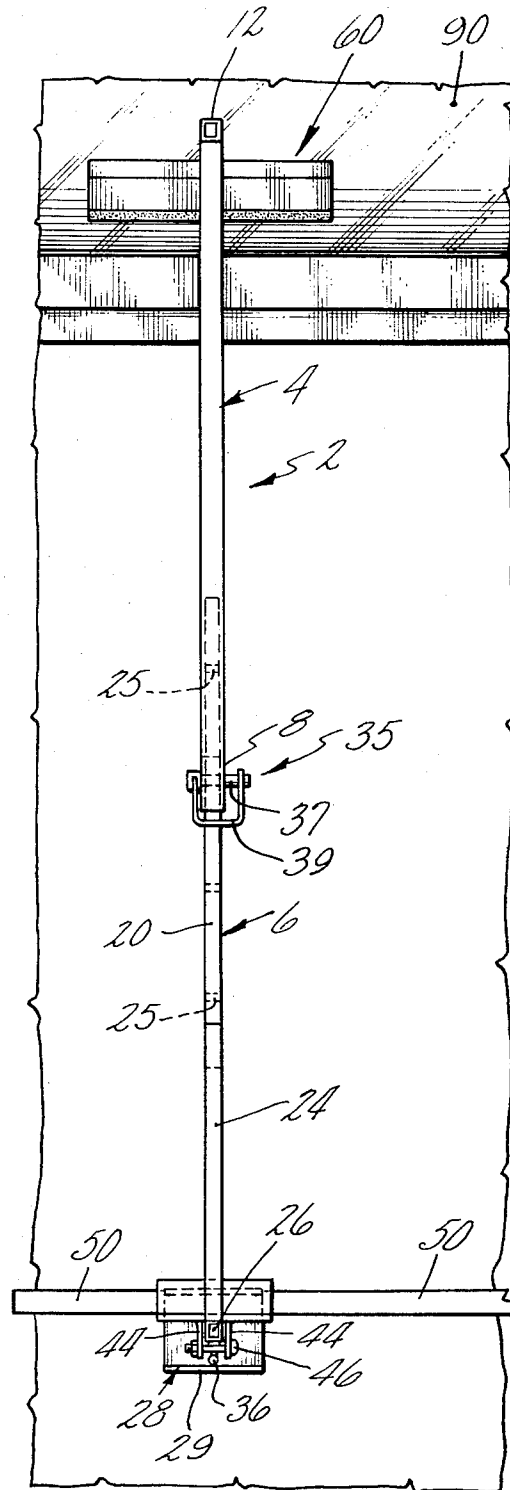


FIG. 5

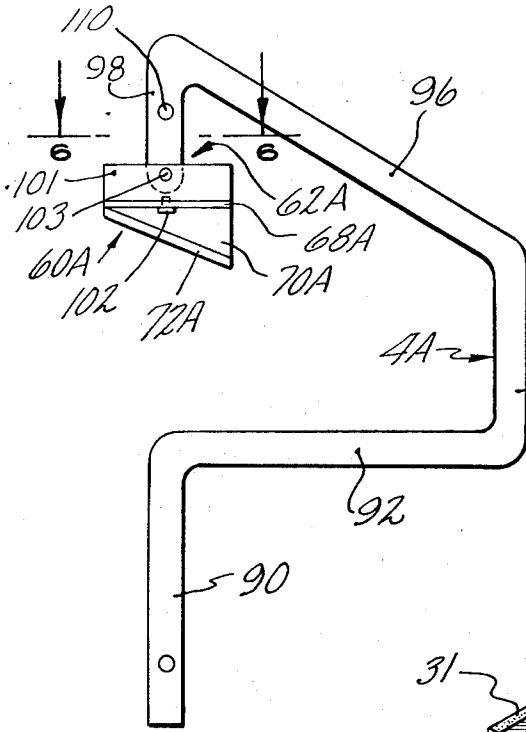


FIG. 3

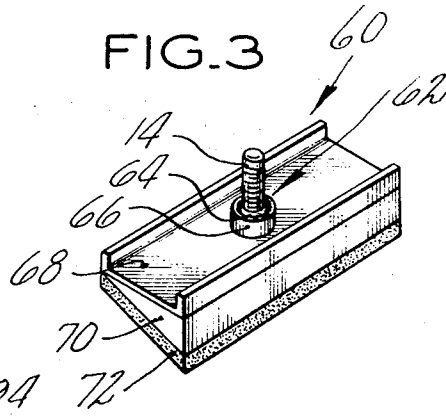


FIG. 4

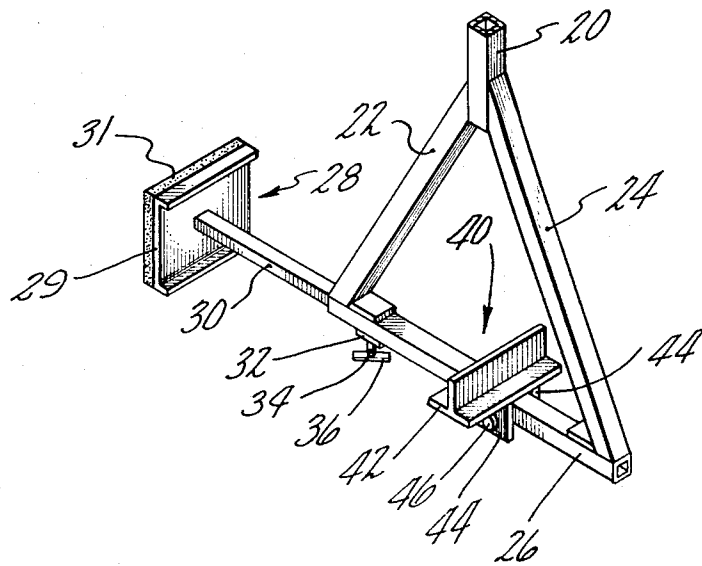
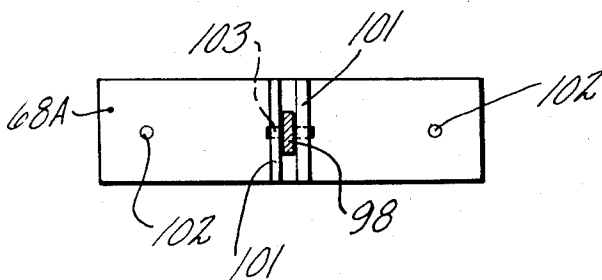


FIG. 6



SCAFFOLD DEVICE

CROSS-REFERENCE TO RELATED APPLICATION

This is a continuation-in-part of now abandoned application Ser. No. 114,135, filed Feb. 10, 1971.

BACKGROUND OF THE INVENTION

This invention relates to the field of scaffolds and staging and contains improvements advancing the art. A scaffold support is shown in U.S. Pat. No. 3,158,223.

SUMMARY OF THE INVENTION

An object of this invention is to provide a safe scaffold device for use on a building having a large overhang wherein its positioning and movement can be controlled.

Another object of the invention is to provide a foot means on the end of the hook-shaped member for engagement with the top of an overhang which comprises a wedge-shaped member which will allow for slope of an overhang, said foot being of such length so as to span two rafters, thereby giving a maximum of support. Said foot is connected by a ball and socket joint. This permits it to be turned to work equally as well on the gable end of a building.

Another object of the invention is to provide a lower part having two downwardly extending arms, one extending forwardly of the foot means and one extending rearwardly of the foot means. This allows for movement of the plank under the support point for proper weight distribution.

Another object of the invention is to provide means on the plank supporting member to help fix the plank in position to prevent side sway of two scaffold supports having connecting plank means. A bumper is mounted on the lower portion to engage the side of a structure to further provide safe mounting.

DESCRIPTION OF THE DRAWINGS

FIG. 1 is a side view of a scaffold device incorporating the invention positioned on a building structure.

FIG. 2 is an end view of the scaffold device shown in FIG. 1.

FIG. 3 is a perspective view of the slip resistant foot.

FIG. 4 is a perspective view of the lower portion of the scaffold device on which a scaffold plank or planks would rest.

FIG. 5 is a modification of the upper part of the scaffold device.

FIG. 6 is a view of the top of the foot means of FIG. 5.

DESCRIPTION OF THE PREFERRED EMBODIMENT

As shown in FIGS. 1 and 2, this scaffold device 2 comprises two main parts, upper part 4 and lower part 6. The upper part 4 is formed of a hook shape. A short sleeve member 8 has an arm 10 fixed thereto extending upwardly therefrom at an acute angle from the center line thereof. An arm extension member 12 fixed to the top of the arm 10 extends at an angle therefrom so that it passes over the center of sleeve member 8. Member 12 has a short member 14 fixed thereto which extends downwardly from adjacent the free end of the member 12 and has its center line coinciding with the center line of the short sleeve member 8. A brace 16 extends between the arm 10 and member 12 to reinforce the con-

struction. These members can be fixed to each other by any means desired, but in the device shown, these members were welded together.

Member 14 has a foot means 60 connected to its lower free end by a ball and socket arrangement 62. A ball 64 is located on the end of the member 14 and the socket 66 is located on the top of the foot means 60. Foot means 60 comprises a top plate 68, a wedge member 70, having two principal sides, and a slip-resistant pad 72. The wedge member 70 is provided to allow for the incline of a roof 90 (see FIG. 1) of a structure 89. The top plate 68 is fixed to one principal side of the wedge member 70 and the slip-resistant pad is fixed to the other principal side.

The lower part 6 is formed having an elongated member 20 which is slidably mounted in the short sleeve member 8. A hole is provided in the short sleeve member 8 to align with any one of the four holes 25 in the elongated member 20 to position the scaffold device at four different lengths. A pin device 35 is used to fix the upper part 4 and lower part 6. The pin device 35 consists of a pin 37 and a spring retainer 39. The pin extends through the hole in the short sleeve member 8 and the desired hole 25 in the elongated member 20 to fix the scaffold device at a desired length. The spring retainer 39 is pivotally mounted on one end of the pin and is adapted to snap on the other end when the pin is in position. This keeps the pin from falling out.

The bottom of the member 20 has two arm members 22 and 24 extending downwardly therefrom at an angle b. These members 22 and 24 are located in a plane which would extend through the arm 10 and member 12 (see FIG. 2). The sleeve member 8 and the elongated member 20 are formed so that while there is slideable movement therebetween, no relative rotation is permitted. In the construction shown, the short sleeve member 8 has its internal surface formed as a square and the member 20 has its external cooperating surface formed as a square.

The lower free ends of the members 22 and 24 have a tubular member 26 connected therebetween which is perpendicular to the member 20. A padded bumper 28 is mounted on a rod 30 which is slidably mounted in the member 26. Rod 30 and member 26 are also formed so that the rod does not rotate therein. The bottom of the member 26 is reinforced at 32 and a threaded hole is placed therein to the interior of the tubular member 26. A threaded bolt 34 is threadably mounted in the hole and a handle 36 is fixed to the free end thereof. The handle 36 is used to fixedly position the padded bumper. The bumper can be a flat plate 29 with a resilient or soft pad 31 thereon for engaging the side 92 of a structure 89. The handle is turned until the member 30 is permitted to slide in the tubular member 26, when the member 28 is properly located, handle 36 is turned until the threaded bolt 34 engage the slidable member 30 and fixes it with respect to the tubular member 26.

A plank supporting member 40 is slidably mounted on the tubular member 26. This member has an inverted T-cross section. Two flat projections 44 extend from the bottom of the crosspiece 42, to engage the sides of the tubular member 26 (see FIG. 4). A bolt 46 extends through the ends of flat projections 44 to squeeze the projections together and fixedly locate the member 40 on the tubular member 26. A plank 50 can be placed between the member 40 and the member 22 or 24 for an individual to stand thereon. A small shim

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member 52 is provided at each end of the member 26 so that the plank will remain parallel to the member 46. The shim members 52 are the same thickness as the crosspiece 42. With the plank 50 in place, the member 40 is pushed towards the arm member 22 on the other side of the plank 50 to squeeze the plank therebetween (see FIG. 1). The bolt 46 is then tightened to fix the plank in relation to the scaffold device. This provides a resistance to the side swaying of two scaffold devices with a plank between.

In FIG. 5, a modification of the upper part of the scaffold device is shown. A hook-shaped upper part 4A has a vertical section 90 and a horizontal section 92. Another vertical section 94 extends further upwardly with an arm member 96 extending upwardly at an angle so that it passes over the center of section 90. Arm member 96 has a short member 98 fixed thereto which extends downwardly from adjacent the free end of the member 96 and has its center line coinciding with the center line of the section 90.

Member 98 has a foot means 60A connected to its lower free end by a swivel arrangement 62A. Foot means 60A comprises a wedge-shaped member 70A with a slip-resistant pad 72A fixed to one principal side and a flat member 68A fixed to the other principal side. A channel member 101 has its connecting bottom portion bolted to the flat member 68A by a bolt 102, so that the flat member 68A can be rotated with respect to the channel member 101. This would permit the foot means 60A to turn with respect to the short member 98. The short member 98 extends between the sides of the channel member 101 and is pivoted thereto by a bolt 103 allowing the foot means 60A to swing free on that axis. This construction with the flat member 68A bolted by a single bolt 102 to the bottom of the channel member 101 and with the short member 98 pivoted to a single bolt 103, permits a swivel action. The hole 110 is drilled through the short member 98 for tying the upper part of the scaffold to a building as a safety precaution.

We claim:

1. A scaffold support device for supporting a scaffold means below an overhang, said device having a hook-shaped means having an upper end portion and lower end portion, said hook-shaped means having an intermediate portion shaped to be placed around an overhang with the upper end portion over the overhang and the lower end portion under the overhang, a scaffold means, the lower end portion having attaching means for attaching the scaffold means thereto, the upper end portion having a foot means attached thereto for engaging the top of the overhang, said foot means having a large span for extending lengthwise of an overhang, said foot means having a rigid wedge-shaped member having two principal sides extending for the length of the span, means connecting the upper end portion of

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said hook-shaped means to one principal side of said wedge-shaped member, a slip-resistant pad, means connecting said slip-resistant pad to the other principal side of said rigid wedge-shaped member for engagement with the top of the overhang, said scaffold means having a plank supporting means, said plank supporting means including an elongated member having an inverted V-shaped member fixedly attached at its bottom, said V-shaped member being formed by two downwardly extending arm members, said elongated member being connected to the attaching means of said lower end portion, a plank supporting member connecting the bottom ends of the arm members of the V-shaped member, said plank supporting member having sliding means thereon, said sliding means having a flat side for engaging the side of a plank and maintaining the plank in place against one arm member of the V-shaped member.

2. A scaffold support device as set forth in claim 1 wherein said sliding means has a crosspiece slidable on said plank supporting member, said flat side being located on a member extending upwardly from the crosspiece, said crosspiece and the member extending upwardly therefrom forming means for receiving the side of a plank.

3. A scaffold support device as set forth in claim 2 wherein a shim member is located on said plank supporting member adjacent an arm member for receiving the other side of a plank, said shim member having substantially the same thickness as the crosspiece.

4. A scaffold device as set forth in claim 1 wherein a bumper member is slidably mounted with respect to said plank supporting member connecting the bottom ends of the arm members of the V-shaped member.

5. A scaffold support device as set forth in claim 1 wherein said hook-shaped means includes a downwardly extending straight section forming the lower end portion, and a downwardly extending straight section forming the upper end portion, said straight sections being in alignment.

6. A scaffold support device as set forth in claim 5 wherein the foot means swivels on the downwardly extending straight section of the upper end portion of the hook-shaped means.

7. A scaffold support device as set forth in claim 1 for supporting a scaffold means below an overhang of a building having a plurality of rafters, said foot means having a large span which will extend across at least two rafters.

8. A scaffold support device as set forth in claim 1 wherein said principal sides of said wedge-shaped member converge to form an edge having an acute angle, said edge having the acute angle being directed away from the intermediate portion of the hook-shaped means.

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