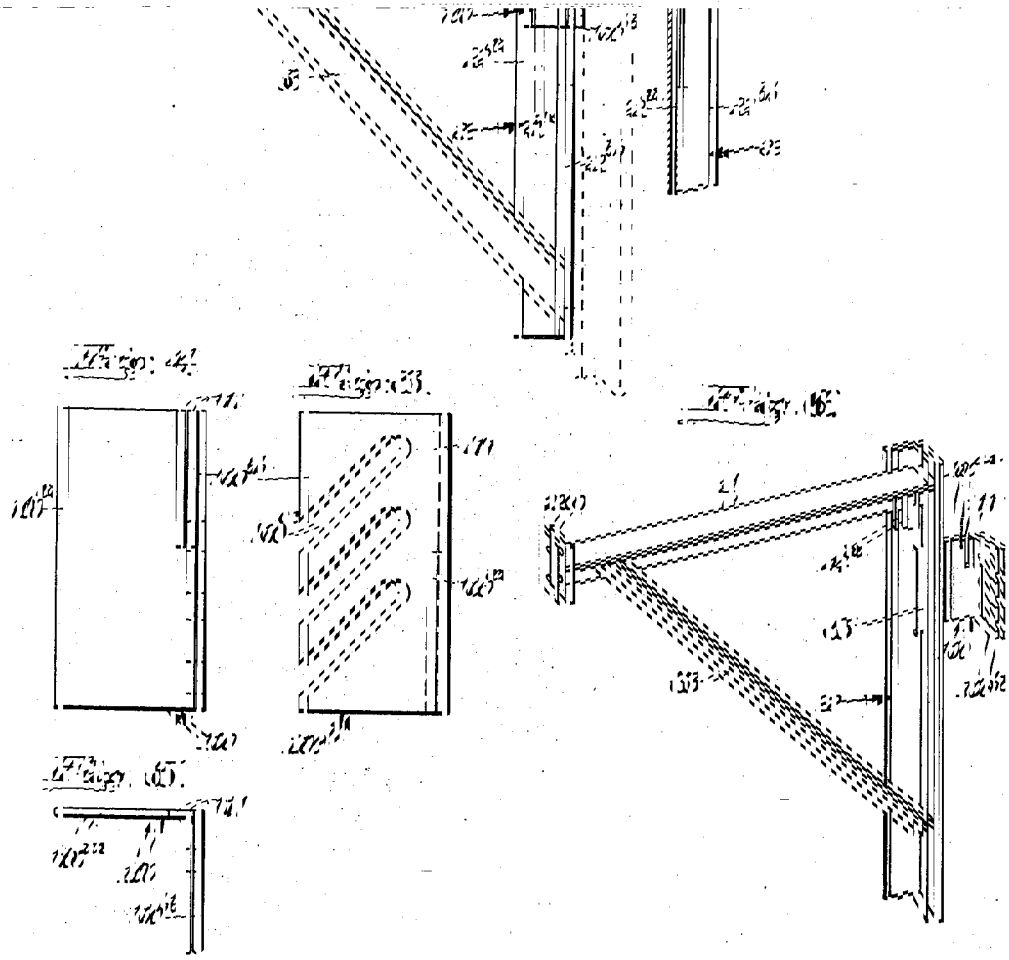


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SCAFFOLDING BRACKET

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4 Claims. (Cl. 248—235)

1

My present invention has for its object to provide a novel construction of a bracket for various uses in supporting heavy loads which consists of few parts and can be readily manufactured in quantities with little cost.

Another object of my invention comprehends a bracket especially adapted for use in building construction in the erection of temporary scaffolding which is capable of being readily constructed in various sizes and may be quickly put in place and subsequently removed with equal facility.

To these and other ends my invention embodies further improvements all as will be fully described in the accompanying specification, the novel features thereof being set forth in the accompanying claims.

In the drawings:

Figure 1 is a side elevation of a bracket constructed in accordance with my invention.

Figure 2 is a vertical sectional view taken on the line 2^x—2^x of Fig. 1.

Figure 3 is an enlarged view of the wall plate or attaching member as seen when looking in the direction of the arrow a of Fig. 1.

Fig. 4 is a side view of said wall plate.

Figure 5 is a view looking downwardly on the top of the wall bracket.

Figure 6 is a perspective view showing the bracket and wall plate disconnected but in their relative operating positions.

Similar reference characters applied to the various figures indicate similar parts.

In illustrating my invention I have shown a load carrying and scaffolding bracket which may be of any desired angular construction in which the load or platform carrying arm is indicated by 1. It projects outwardly in a horizontal direction from the upper end of a vertical column 2 and its outer extremity is supported by a brace arm 3 extending downwardly from an outward point beneath the arm 1 and inwardly into engagement with the lower end portion of the column 2. Each of the above mentioned parts are made of angle iron of cross sectional dimension selected in accordance with the load which it is intended to carry.

In assembling the parts the arm 1 will be positioned with one of its faces uppermost or horizontally which places its other face 1^a in a vertical plane. The inner end of this arm is placed within the angle of the column member 2 in engagement with the inner face of its outwardly extending side 2^a to which it is permanently secured, preferably by welding. At this point I also weld on the inner face of the part 1^a a finger 4 the lower end of which 4^a extends downwardly parallel with the part 2^a of the column but is separated therefrom a distance equivalent to the thickness of the part 1^a for a purpose to be presently described.

2

The other face 2^b of the angularly shaped column which comprises a back extends parallel to the wall, post or other structure to which the bracket is to be attached and formed therein is a longitudinally extending slot 5. This slot is located with one of its edges forming a continuation of the inner face of the part 2^a and its upper end is located somewhat below the point of attachment of the finger 4. The length of the slot is such as to accommodate the insertion of the outwardly projecting flange or edge of a wall plate.

In Figures 3, 4 and 5 I have shown a member designed to be secured to the permanent support to which the bracket is to be attached and it is so made that the bracket may be removably secured. This element which I designate a wall attachment is likewise constructed of angle iron of the same cross sectional dimensions as that selected for the bracket. It is designated generally as 10 and has the two flanges 10^a, 10^b. The flange 10^b fits flatwise against a post, wall or other support to which it may be secured either temporarily or permanently by suitable attaching bolts, lag screws or heavy nails, it being for this purpose provided with spaced apertures, or as I have shown with a series of angularly disposed downwardly extending slots 10^c by means of which it may be readily engaged with correspondingly located fastening devices.

The other flange 10^a of the wall attaching member projects outwardly and extending downwardly from its upper inner edge is a slot 11. From this arrangement it will be seen that when the vertical bracket member 2 is positioned with its slot 5 in alinement with the flange 10^a the latter will enter it and as the bracket falls by gravity side 2^b of the column will be engaged in the slot 11 of the wall supporting member. At the time this interlocking connection is established the upper free end of the flange 10^a which is then on the inside of the column passes beneath the free end 4^a of the finger 4 which prevents any tipping or canting of the bracket. Removal of the bracket, it will be seen, can be effected with equal facility as it is merely necessary to elevate it a short distance to free it from the slot 11 on the support and then pull it outwardly.

arm 1 slightly below the top of the vertical column so that its uppermost extremity provides two projections 2^c—2^d which serve as members for locating the inner edges of scaffolding planks. The projection 2^c may act as an abutment for the end of a plank, on occasion, or the latter may be provided with a notch to receive it. The other projection 2^d serves to position the inner edge of a scaffold plank a short distance away from the contiguous face of the support on which the bracket is mounted.

Located crosswise of the outer end of member 1 is a rigidly secured vertically extending safety plate 20. This serves as an abutment for securing the outer edges of the scaffolding planking. Provided therein are two perforations located at opposite sides of the horizontal angular part of member 1, which may be used for convenience in attaching a stanchion which may carry a guard rail or safety chain extending from one bracket to another.

Attention is especially called to the feature of my invention relating to the location of the slots by means of which the interlocking of the parts is effected. It will be seen that these are located at the inner edges of the angles of each angle iron where the structures are the strongest so that each will carry the maximum load for angle irons of given cross sectional measurements.

The entire structure comprising but two parts is well adapted for a variety of uses. On a building when a scaffolding is more or less frequently required the wall attachment which is comparatively small and inconspicuous may be left in place, or it may be removed by loosening the securing devices, the latter being allowed to remain or be removed as may be desired.

What I claim and desire to secure by Letters Patent is:

1. A scaffold bracket comprising a vertical column composed of a channel angular in cross section one side of which comprises a back, the other an outwardly extending flange, a load carrying arm extending outwardly from the upper end of the column and secured to the flange, said back having a longitudinal slot located with its upper edge below the load arm, and a member for attachment to a permanent support having an outwardly extending flange slotted from its top downwardly and adapted to interlock with the back column flange by engagement therewith between the load arm and the top of the slot in said column back.

2. A scaffold bracket comprising a vertical column composed of a right angular channel piece one side of which constitutes a back, the other a flange extending outwardly therefrom, said back being provided with an elongated channel in alinement with the inner face of the flange, a cooperating carrying member similarly shaped in cross section one side of which is adapted to be attached to a permanent support the other side extending outwardly and being of a length to pass through the aforementioned slot, and being slotted from the top downwardly for the purpose of interlocking with the back channel piece, and a load carrying arm on the column.

3. A scaffold bracket comprising a vertical column composed of a right angular channel piece one side of which constitutes a back, the other a flange extending outwardly therefrom, said back being provided with an elongated channel in alinement with the inner face of the flange, a cooperating carrying member also of right angular shape one side thereof also constituting a back and adapted for attachment to a support the other side extending outwardly and of a length to pass through the slot in the column back and provided with a slot open at the top and located at the apex of its inner angle, and a load carrying arm attached to the flange on the column above the point of interlock of the column and its carrying member.

4. A scaffold bracket comprising a supporting member of right angular cross section, one side being adapted for attachment to a support with the second side extending outwardly therefrom and provided with a slot extending downwardly from its upper end at the innermost point of the angle, a similarly shaped vertical column the rear side portion thereof having an elongated slot at the innermost point of its angle for the reception of the outwardly extending side of said supporting member and by gravitational movement interlocking with the slot therein, the second side of said column extending outwardly from its back with its inner face in engagement with the outwardly extending second side of the supporting member, a load carrying arm extending outwardly from the upper end of the column and connected to said inner face, and a guide finger extending downwardly from the arm in position to engage the free end of the second side of the supporting member when the column member is positioned thereon.

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REFERENCES CITED

The following references are of record in the file of this patent:

UNITED STATES PATENTS

Number	Name	Date
1,552,913	Danielson	Sept. 8, 1925
1,662,667	Goldsboro	Mar. 13, 1928
1,808,082	Thompson	June 2, 1931
1,830,438	Miller	Nov. 3, 1931
1,983,470	Knape	Dec. 4, 1934
2,034,338	Frost	Mar. 17, 1936
2,332,477	Thornley	Oct. 19, 1943