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HINGED SUPPORT BRACKETS

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This invention relates to improvements in hinged support brackets, and more particularly to brackets for supporting scaffolding, or the like, placed therebetween. In building construction and maintenance work, it is often necessary for workmen to utilize scaffolding as supports for themselves and the materials with which they work. The scaffolding thus employed may, in turn, be self-supporting, or it may be carried by brackets or supports affixed to the walls of the building. The present invention relates to such brackets or supports which are affixed to buildings and upon which scaffolding may be supported.

Various devices have been proposed heretofore to perform this function, but these devices have all had certain disadvantages which prevented their widespread acceptance. An important limitation on the use of these brackets has been the fact that they are capable of use only with types of building only, i.e., a bracket designed for use with a masonry structure cannot readily be used on a wooden structure, and vice versa.

Accordingly, it is an object of this invention to provide a bracket of improved construction adapted to be removed readily from the wall structure to which it is attached.

Another object of this invention is to provide a bracket comprising two leaf members pivotable about a hinge pin. The upper leaf member has a pointed tip adapted to be driven into a masonry structure, and a body portion having a hole therein to permit the insertion of a standard brick hammer when the leaf member is to be withdrawn from its embedded position. The lower member is appropriately shaped to provide a support area for a board or other scaffolding member to be placed thereupon.

When the bracket is to be attached to a wooden wall, the upper leaf member is placed flat against the wall with the pointed tip downward and a nail or other suitable fastening element is driven through the hole in the body portion, a side of which has a notch therein for such purpose.

Another object of the invention is to provide a bracket comprising two leaf members, generally indicated by the numerals 1 and 2, respectively.

The upper leaf member comprises a body portion 3, formed of a single blank of initially flat stock, as shown in Fig. 2. This body portion is folded upon itself approximately midway of the length thereof, providing two sides spaced apart. One of these sides, opposite from the hinge end, has a pointed end member 4 projecting therefrom. This pointed end 4 is adapted to be driven into a masonry structure (FIG. 5) to anchor firmly the hinged support bracket and to hold it in place.

The body portion 3 has two rectangular openings 5 and 6 located therein. These rectangular openings have notches 7 and 8 centrally located in adjacent edges thereof. The body portion is folded back upon itself along a line located midway between the rectangular openings 5 and 6 so that the rectangular ones 5 and 6 and the notches 7 and 8 are in alignment and in registry.

The body portion 3 has a rectangular cutout 9 at one end thereof, opposite from the pointed end 4, with ear portions 10 and 11, which are bent into a cylindrical configuration to receive a hinge pin 12 therein.

The hinge pin 12 comprises a cylindrical body member having a head or cap member 14.

Attached to the upper leaf member is the lower leaf member 2, which comprises a vertical portion 15 and a laterally projecting portion 16. The laterally projecting portion 16, which extends at right angles from the end of the vertical portion 15, has an upturned end 17 which is formed at an angle of approximately 30 degrees with respect to the vertical member 15. The purpose of this upturned portion is to prevent the scaffolding 20 supported by the laterally projecting portion 16 from sliding off the end thereof.

At the upper end of the vertical portion 15 is a projecting tab member 18 which is of substantially the same width as the rectangular cutout 9 in the upper leaf member 1. This tab 18 is bent over in a cylindrical fashion, as were the ear portions 10 and 11, to receive the hinge pin 12 therethrough. The upper and lower leaf members are thus pivotally secured together by means of the hinge pin 12 which passes through the cylindrical openings formed by the ear portions 10 and 11 on the upper leaf member 1 and the projecting tab 18 on the lower leaf member 2.

Since the folded-back portion of the upper leaf member is spaced from the remainder of the body portion 3, a filler plate 19 is provided. The filler plate 19 which is preferably U-shaped, fills the gap between the folded-back portion of the upper leaf member and the rest of the body portion 3, but does not obstruct the rectangular openings 5 and 6, or the notches 7 and 8. The purpose of this filler plate is to provide rigidity to the upper leaf member 1, and to prevent the leaf member from being distorted when the body portion 3 thereof is subjected to hammering action during the process of insertion, or attachment to a supporting structure. The filler plate 19 may be secured in position by welding, or other suitable means, or it may be secured entirely by the spring-like clamping action of the folded-back body portion 3.

FIG. 5 is a side view of the hinged support bracket attached to a wooden wall. From this view it is seen that the upper leaf member 1 is driven horizontally into the masonry, such that the pointed end member 4 is completely embedded therein. The lower leaf member 2 is then supported about the axis of the hinge pin 12, with the vertical portion 15 thereof resting flat against the masonry wall. The laterally projecting portion 16 provides an appropriate horizontal support surface for the scaffolding member 20 which is placed thereon.

The scaffolding member 20 is prevented from sliding out of the bracket by means of the upturned end portion 17.

FIG. 4 illustrates the hinged support bracket secured to a wooden wall structure. In attaching the upper leaf member to a wooden structure, the upper leaf member 1 is placed with the body portion 3 flat against the wall and the pointed end 4 projecting downwardly. A nail 21, or other suitable fastening means, is driven into the wooden wall through the aligned rectangular openings.

FIG. 1 is an exploded perspective view showing the component parts of the hinged support bracket; FIG. 2 is a top plan view of the blank for the upper leaf member; FIG. 3 is a top plan view of the assembled bracket; FIG. 4 is a perspective view showing the hinged support bracket mounted on a wooden wall; and FIG. 5 is a perspective view showing the hinged support bracket mounted on a masonry wall.

Referring now to FIGS. 1 to 3, the hinged support bracket is shown as comprising upper and lower leaf members, generally indicated by the numerals 1 and 2, respectively.
5 and 6 in the upper leaf member 1. The upper leaf member is then firmly seated in place over the nail 21, or other suitable fastening device, by means of the notches 7 and 8 which are centrally located and assure correct positioning. The lower leaf member functions in the same fashion, with either masonry or wooden structures.

From the foregoing description, it can be seen that a hinged support bracket has been provided which overcomes the deficiencies in the structures heretofore presented, and which offers versatility and convenience which is not possible apart from the novel structure disclosed.

Support brackets made in accordance with this invention are of particular utility to workmen, such as bricklayers, in the building trades. By employing the hinged support brackets herein described, a bricklayer has available a readily movable scaffolding support which enables him to support the bricks with which he is working in a position immediately adjacent the brick wall being constructed. This eliminates the necessity for the bricklayer to bend down for each brick, as is the general procedure when the bricks are supported on the same scaffolding on which the workman himself stands. As the height of the brick wall increases, the scaffolding supports are easily removed by inserting a standard brick hammer into the rectangular openings 5 and 6 in the upper leaf member and withdrawing the said member from the supporting wall. The hinge bracket then may be relocated wherever desired.

The bracket structure may be made inexpensively of sheet metal stock of the desired thickness. Preferably, the lower member 2 is of materially heavier stock for supporting the scaffolding.

While the invention has been illustrated and described in one embodiment, it is recognized that variations and changes may be made therein without departing from the invention as set forth in the claims.

I claim:

1. A support bracket for scaffolding, comprising a lower leaf member including an upturned arm adapted to bear against a wall and a substantially horizontal arm adapted to support a member thereon, and an upper leaf member hinged at one end to the upper end of the upturned arm, said upper leaf member extending forwardly from the hinge over the substantially horizontal arm at a substantially parallel thereto, a prong on said upper leaf member being swingable on the hinge in alignment with the upturned arm, and an opening therein to facilitate withdrawal of the prong from the wall.

2. A support bracket for scaffolding, comprising a lower leaf member including an upturned arm adapted to bear against a wall and a substantially horizontal arm adapted to support a member thereon, and an upper leaf member hinged at one end to the upper end of the upturned arm, said upper leaf member extending forwardly from the hinge over the substantially horizontal arm and substantially parallel thereto, a prong on said upper leaf member above the upturned arm when the upper leaf member is in said parallel position to be inserted into the wall, said upper leaf member having a slot therethrough spaced from the wall in said angular position to facilitate withdrawing of the prong from the wall.

3. A support bracket for scaffolding, comprising a lower leaf member including an upturned arm adapted to bear against a wall and a substantially horizontal arm adapted to support a member thereon, and an upper leaf member hinged at one end to the upper end of the upturned arm, said upper leaf member extending forwardly from the hinge over the substantially horizontal arm at a substantially parallel thereto, a prong on said upper leaf member extending rearwardly therefrom when the upper leaf member is in said angular position to be inserted into the wall, said upper leaf member having a slot therethrough spaced from the wall in said angular position to facilitate withdrawing of the prong from the wall, said slot having a notch therein in position to receive a fastening for supporting the bracket when the upper leaf member is turned on the hinge substantially in alignment with the upturned arm.

4. A support bracket for scaffolding, comprising a lower leaf member including an upturned arm adapted to bear against a wall and a substantially horizontal arm adapted to support a member thereon, and an upper leaf member hinged at one end to the upper end of the upturned arm, said upper leaf member extending forwardly from the hinge over the substantially horizontal arm at a substantially parallel thereto, a prong on said upper leaf member extending rearwardly therefrom when the upper leaf member is in said angular position to be inserted into the wall, said upper leaf member and prong being swingable on the hinge in vertical position in alignment with the upturned arm, and means in the upper leaf member in position to receive a fastening therethrough in said last-mentioned position.

5. A support bracket for scaffolding, comprising an L-shaped member having a horizontally disposed leg adapted to support a member thereon, a vertically extending leg having fastening means hingedly secured to its end, said fastening means having a prong at one end and an opening in the other end, whereby said fastening means may be swung to a substantially horizontal position for insertion of the prong into a wall or may be swung to a substantially vertical position to lie flush against a wall so that securing means may be inserted through said opening to attach the fastening means to the wall.

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