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SCAFFOLD BRACKET

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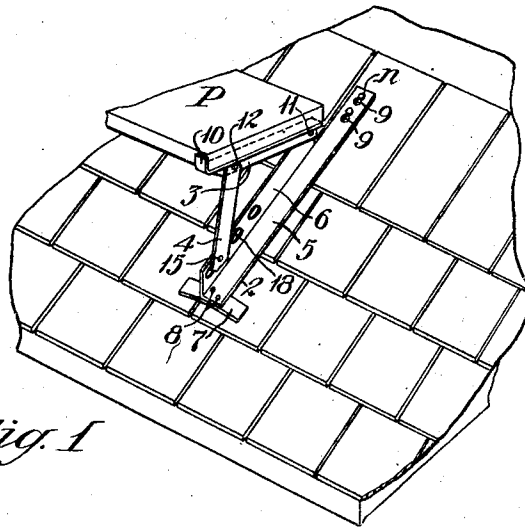


Fig. 1

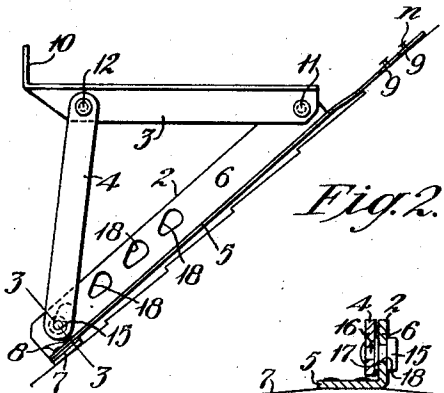


Fig. 2

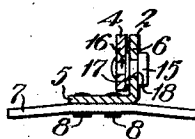


Fig. 3

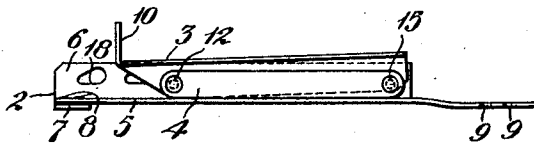


Fig. 4

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SCAFFOLD BRACKET.

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This invention relates to an improved scaffold-jack or bracket for holding planks or boards in horizontal position against a roof or side wall to provide a staging for workmen and their tools and implements.

The primary object of the invention is to provide a scaffold-jack or bracket which can be folded into small compass whereby it is easily portable; and one which may be adjusted for use on roofs of different pitch or against a vertical side wall.

A particular object of the improvement is to provide a jack or bracket which may be securely locked in its adjusted relation so that when the scaffold is supported thereon there will be no danger of the bracket collapsing.

An important feature of the improvement consists in providing a locking-means for the jack or bracket which cannot be accidentally released should the bracket or any of its parts be struck by a board, plank or other object.

The invention is described in its preferred embodiment in the following specification, illustrated by the accompanying drawings, in which like reference characters designate like parts. In the drawings:

Fig. 1 is a perspective view showing my improved jack or bracket applied to use in supporting a scaffold on a pitched roof;

Fig. 2, a side elevation of the improved bracket;

Fig. 3, a detailed view of the foot of the bracket, illustrating the improved locking-means in section on the line 3—3 of Fig. 2; and

Fig. 4 a side elevation of the bracket showing it folded with its parts in closed relation.

Referring to the drawings, my improved scaffold-jack or bracket comprises essentially three foldable elements, namely, a base-strip or standard 2; a board- or plank-holding arm or rest 3, which is hinged at one end to the base-strip; and a brace or support 4 extending between the base-strip and the arm.

Preferably, the base-strip 2 is constructed of angle-iron with a flat rest portion 5 adapted to seat against the roof or the side wall of a building and provided with an

upstanding vertical rib 6. At the lower end of the base-strip 2 is a lateral foot or support 7 consisting of a flat strip of metal rivetted to the under side of the rest 5 at 8, and arranged at right angles thereto. The projecting ends of the foot 7 are bent downwardly slightly, see Fig. 3, so that they will seat more securely against the uneven surface of the roof or wall to prevent rocking motion of the base-strip 2. Referring to Fig. 2, the upper end of the flat rest 5 is preferably bent downwardly into the plane of the ends of the foot 7 so that the under side of the standard will clear the edges of the shingles when the bracket is used on a roof. At the upper end of the rest 5 of the base-strip 2 are a plurality of apertures 9 shaped more or less like "button-holes". The larger ends of the apertures 9 are adapted to be placed over the heads of nails or screws *n* inserted into the roof or wall so that their smaller ends will engage the body of the nail or screw, with the heads preventing the release of the bracket therefrom.

The platform arm or rest 3 is constructed from a strip of angle-iron having an end portion 10 bent upwardly at right-angles to adapt it to abut the edge of the board or plank *P*, see Fig. 1, to hold the latter from slipping off from the rest. The arm 3 is hinged to the base-strip 2 by means of a suitable bolt or rivet 11, inserted through the rib 6, see Fig. 2. Pivoted to the outer end of the vertical flange or rib of the arm 3 is the brace 4 consisting simply of a flat bar. The brace 4 is pivoted to the arm 3 by means of a bolt or rivet 12, and at its lower end carries a headed pin or stud 15. The stud 15 has a reduced end 16 inserted through a washer 17 and rivetted through a hole at the lower end of the brace 4, see Fig. 3.

In the upstanding rib 6 of the base-strip 2 are a series of pear-shaped openings 18. The openings 18 are enlarged at their upper ends to adapt the head of the stud 15 to be inserted therethrough, while their lower smaller ends are proportioned to receive the body of the stud with its head overlapping the edges thereof. That is to say, the head of the stud 15 may be inserted through the

larger end of any one of the openings 18 and the body of the stud will then slide down into the contracted end so as to securely lock the brace from disengagement. In fastening the end of the brace 4 to the base-strip 2 in this manner the whole brace is sprung slightly to one side to insert the stud through the opening 18; and likewise, in releasing the brace from the base plate, it is sprung laterally in the same direction. It will be understood that the several openings 18 in the base-strip 2 adapt the brace to be adjusted to different positions to hold the arm or rest 3 at different inclinations. In this way the arm or rest 3 may be set at the proper angle with relation to the base-strip 2 to hold it in horizontal position to receive the board or plank P. When the bracket is used against a vertical wall the brace 4 will be adjusted to fasten its end in the upper opening 18 of the series, while on the other hand, as the base-strip is inclined away from the perpendicular, the brace is shifted to lock it in a lower position on the base-strip.

When the jack or bracket is not in use it may be folded for carrying or storing by releasing the stud 15 from the opening 18 and folding the brace 4 against the rib of the arm 3. The whole rest or arm 3 can then be folded down against the bottom part of the base-strip 2 as shown in Fig. 4.

It will be observed from the above description that my improvement provides a particularly light, compact and simple bracket or scaffold-jack which is adapted for a wide range of uses, and which operates more conveniently and more efficiently than similar devices of the same type heretofore used for like purposes. I am aware that it is old in the art to provide a scaffold-jack or bracket having hinged members adapted to be braced apart to form a rest for a staging or scaffold plank. Heretofore, however, it has never been proposed to provide such a bracket or jack with means for automatically and positively locking the brace in position so that it cannot be accidentally released. With practically all devices heretofore employed for similar purposes the arm or rest for the plank is held or supported from a brace which may be disengaged from the standard or base-strip when the rest or arm is tilted upwardly. A careless workman in lifting a plank, ladder or other object into place is liable to strike the end of the same against the underside of the plank-rest so that the latter will be tilted upwardly to a greater or less extent. Such a tilting or prying up of the plank-rest will release the brace from its fastening means and cause the whole bracket to collapse, in which event the scaffolding will fall and endanger the lives of the workmen standing on or under the staging. With my present improved

device if a ladder, plank, or other object is knocked against the rest or arm 3 of the bracket it cannot lift the same to release the brace 4. That is to say, while the stud 15 on the lower end of the brace 4 may slide upwardly to the end of the opening 18 with which it is engaged still, the stud cannot be disengaged or unlocked from the opening until its head is registered exactly with the larger end of the opening and the whole brace sprung outwardly to one side. It will therefore be seen that the improved locking-means for the brace cannot be accidentally disengaged or released to collapse the bracket and allow the staging to fall.

It has been demonstrated in practice that the present improved bracket or jack is absolutely proof against accidental release or collapse, whereas prior devices have been so open to this objection that a prejudice has arisen against them among workmen and artisans. In fact, most workmen, such as carpenters, roofers and slate layers, are so prejudiced against the use of a self-collapsing bracket that they prefer to nail up their own staging or scaffolding. It is obvious, however, that the construction of a staging or scaffold requires much time and labor and therefore adds to the cost of the construction work, besides delaying the starting and completion of the job. With my present improved bracket a scaffold or staging can be erected very expeditiously and shifted in position from time to time, as occasion requires, with the expenditure of very little labor. Moreover, and most important, my improved bracket or jack provides means for supporting a staging or scaffold which is absolutely safe from the danger of collapsing or falling. It may therefore be employed for a great variety of purposes without jeopardizing the lives of the workmen using it and hence it fills a long felt want in the art to which the device belongs.

It will be understood that I do not claim broadly the use of a folding bracket or scaffold-jack but only the improved construction herein shown embodying the self-locking arrangement and the more secure means for supporting the staging from the wall or roof. What I claim is:

In a device of the type specified, the combination of a member having a relatively flat base-strip with an upstanding rib extending throughout a portion of its length and provided with a series of substantially pear-shaped openings, a portion of the base-strip being extended beyond the upstanding rib and bent downwardly to form a foot-like rest provided with holes for the insertion of nails to fasten it to a roof or other surface, a cross-piece secured to the opposite end of the base-strip and bowed downwardly at its ends to adapt it to cooperate with the bent down foot to raise the main portion of the

base-strip above the surface against which it rests, an arm hinged at one end to the rib on the base-strip to adapt it to serve as a support for a scaffold-plank, a brace pivoted to the other end of the arm, and a headed stud at the opposite end of the brace having its head adapted for insertion through the larger end of any one of the pear-shaped openings in the rib on the base-strip whereby its body will seat in the smaller end of the opening to automatically lock the brace to prevent its accidental release. 10

In testimony whereof I affix my signature.

WILLIAM EARL CASHMAN.