Nov. 8, 1932. R. J. TOBIN 1,886,921

SCAFFOLDING SUPPORT

Filed July 11, 1930

Fig. 1

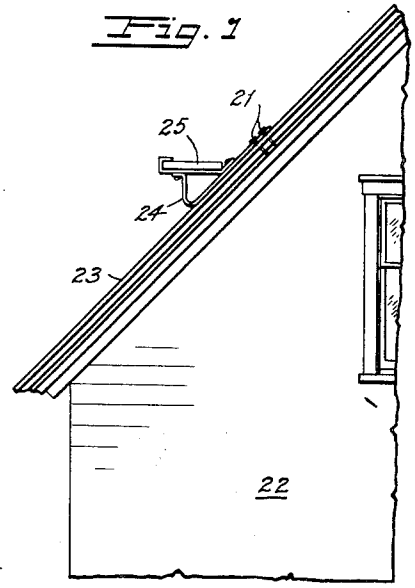


Fig. 2

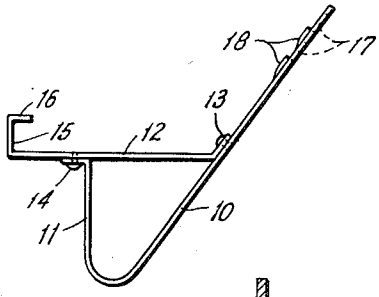
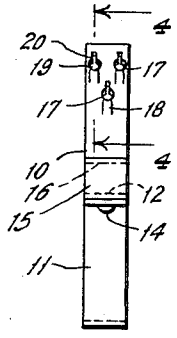


Fig. 3



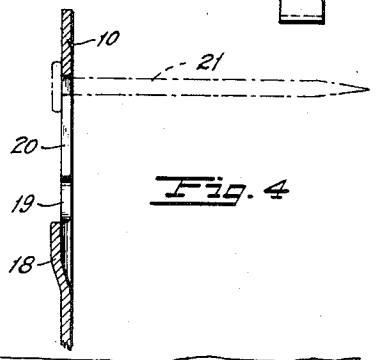


Fig. 4

Fig. 5

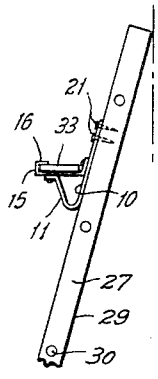
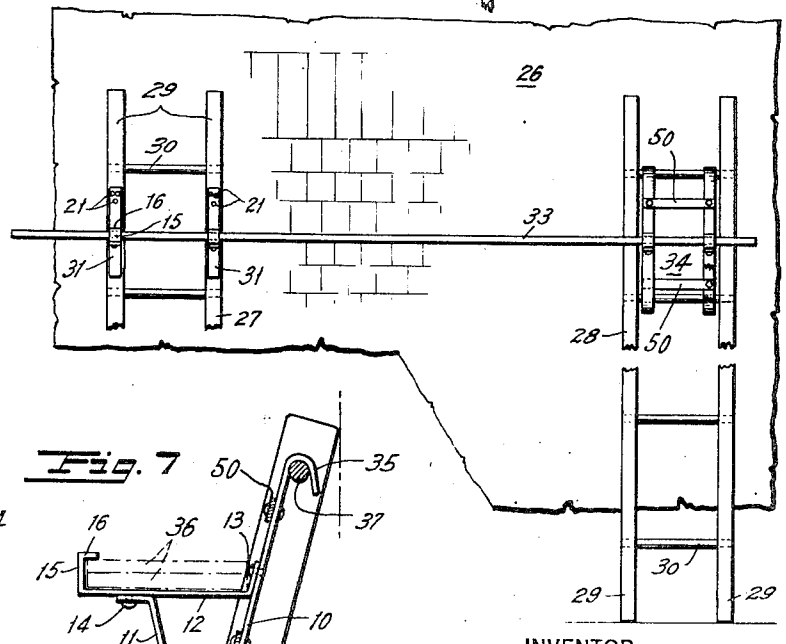


Fig. 6



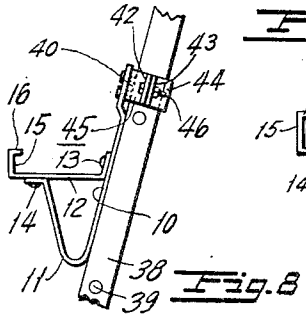


Fig. 8

Fig. 7

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Patented Nov. 8, 1932 1,886,921

UNITED STATES PATENT OFFICE

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SCAFFOLDING SUPPORT

Application filed July 11, 1930. Serial No. 467,151.

The invention relates to supports and more particularly to brackets for supporting scaffolding and the like.

An object of the invention is to produce a bracket of the above kind, which is easily attachable to an inclined member, such as a ladder or an inclined roof.

Another object of the invention is to provide a bracket which will effectively support scaffolding planks and which will prevent the planks from slipping off the brackets, and also prevent them from tipping upwardly at their outer edges.

Another object of the invention is to provide a bracket which is of light weight, and yet which is strong and durable and easy to use.

Other objects of the invention will be apparent from the following description and claim when considered with the accompanying drawing, in which

Fig. 1 illustrates a bracket according to the invention on an inclined roof;

Fig. 2 is a side elevation of the bracket;

Fig. 3 is a front elevation of the bracket;

Fig. 4 is a section through one of the keyhole slots taken on the line 4—4 of Fig. 3;

Fig. 5 illustrates the bracket supported by a ladder;

Fig. 6 is a front elevation of a plank supported by brackets mounted on ladders against the side wall of the building; and

Figs. 7 and 8 illustrate modified forms of bracket.

In the following description and in the claim parts will be identified by specific names for convenience, but they are intended to be as generic in their application to similar parts as the art will permit.

Like reference characters denote like parts in the several figures of the drawing.

In the drawing accompanying and forming part of this specification, practical commercial embodiments of the invention are disclosed, but as such illustrations are primarily for purposes of disclosure, it will be understood that the structures may be modified in various respects without departure from the broad spirit and scope of the invention as hereinafter defined and claimed.

Referring now to the drawing, and more particularly to Figures 2, 3 and 4, the bracket is made up of a strip of sheet metal bent to form an inclined member 10, and a vertical member 11. The bracket further comprises a member which is bent to form a horizontal supporting portion 12, a vertical retaining portion 15 and an inwardly projecting portion 16. The portion 12 has an offset part which is secured to the inclined portion 10 by a rivet 13, and the vertical portion 11 has an offset portion which is secured to the horizontal portion 12 by a rivet 14. The rivets 13 and 14 may be substituted by or supplemented with welding or any other form of fastening metal members.

For securing the bracket to a supporting member a plurality of keyhole slots 17 may be provided, three being illustrated in these figures. Each keyhole slot comprises a comparatively large circular portion 19, and a comparatively long and narrow portion 20. The part of the metal adjoining the circular portion 19 is pressed up, as indicated at 18, to facilitate threading the brackets over the nails. It will be understood that if desired the brackets may be placed in position, and nails may be driven through the parts 20, or if desired, the nails 21 may be driven in position first and the brackets threaded over the nails by passing the head of the nail first through the circular part of the hole 19 and moving the brackets downwardly so that the comparatively long and narrow portion 20 surrounds the shank of the nail 21 under the head. It will thus be seen that the offsetting at 18 facilitates mounting the brackets on and detaching them from the nails 21.

The angle between the inclined portion 10 and the horizontal portion 12 may be determined by the angle of slope of the surface on which the bracket is to be used. Furthermore, the brackets may be secured to an inclined ladder, such as indicated in Figures 5 and 6, or to the inclined roof of a house, such as indicated in Figure 1.

Referring now to Figure 1, the house is indicated by 22 and the inclined roof by 23. A plurality of brackets are indicated by 24, these brackets supporting a plank 25.

Referring now to Figs. 5 and 6, the side wall of a building is denoted by 26, and a number of ordinary ladders 27 and 28 may be leaned up against the building, as indicated. These ladders may be of the usual construction comprising a pair of longitudinal members 29 supporting a plurality of rungs therebetween.

For supporting the scaffolding one or more brackets, indicated by 31 may be fastened to the longitudinal members of the ladders by nails driven into the longitudinal members, as indicated in the ladder at the left of Fig. 6. A plank indicated by 33 rests upon the horizontal parts of the brackets 31, being held in position by the portions 15 and 16 of the brackets.

If desired, the bracket above described may be provided with an alternative fastening means in the form of a hook indicated by 35 in Fig. 7. In this figure the ladder 28 has a plurality of rungs 37, and the bracket 34 has a hooked portion 35 hooked over one of the rungs of the ladder, the bracket resting against the next lower rung.

In this case it is preferable to make the brackets in pairs permanently fastened together by cross members 50 suitably riveted or otherwise rigidly secured to the inclined members 10 of the brackets as indicated in Fig. 7 and in the right side of Fig. 6. These serve to prevent all chance of sidewise tipping of the outer parts of the brackets.

If desired, a plank made of two boards 36 instead of a single board may be supported by the brackets as indicated in Fig. 7.

In cases where it is not desirable to use the brackets described above, a bracket with a clamp may be used as indicated in Fig. 8. In this construction the single brackets are provided with a clamp 45 at the upper end of the inclined portion 10, the clamp engaging around the longitudinal member of the ladder. The clamp 45 is made up of jaws or sections 40 and 44 through the flanges 42 and 43 of which clamping screws or bolts indicated by 46 are passed. The upper end of the inclined member 10 is riveted or otherwise secured to the part 40.

If desired, the clamp 45 may be tightly affixed to the longitudinal member of the ladder or it may be more or less loosely affixed thereto; in either case the rungs 39 will prevent downward movement of the bracket for any dangerous distance.

In case the supports are nailed to a shingled surface the nail holes can easily be plugged up by roofing material, especially in case flexible composition shingles are used. In short, these supports are inexpensive to make, easy to position and reliable to use, effectively supporting the planking and preventing displacement thereof with the consequental possible injury to the workmen.

While certain novel features of the invention have been shown and described and are pointed out in the annexed claim, it will be understood that various omissions, substitutions and changes in the forms and details of the device illustrated and in its operation may be made by those skilled in the art without departing from the spirit of the invention.

What is claimed is:

In scaffolding, a plurality of inclined ladders, a support on the upper side of each ladder, each support comprising spaced brackets, each bracket comprising a first strip having an inclined portion and a vertical portion connected by a bend under said portions, a second strip having a horizontal portion and an outer upward bend providing an upstanding portion and an inwardly projecting portion, said first strip having the top of said vertical portion secured to the horizontal portion between the ends thereof, said second strip having its inner end secured to said inclined portion, said inclined portions having means at their upper ends for suspension from said ladders, each support having cross members connecting the brackets thereof to prevent turning of the brackets under load, and a plank extending from one of said supports to the other and resting on both horizontal and in both outer upward bends of each support.

In testimony whereof I have hereunto set my hand.

ROBERT J. TOBIN.