

**No. 713,358.**

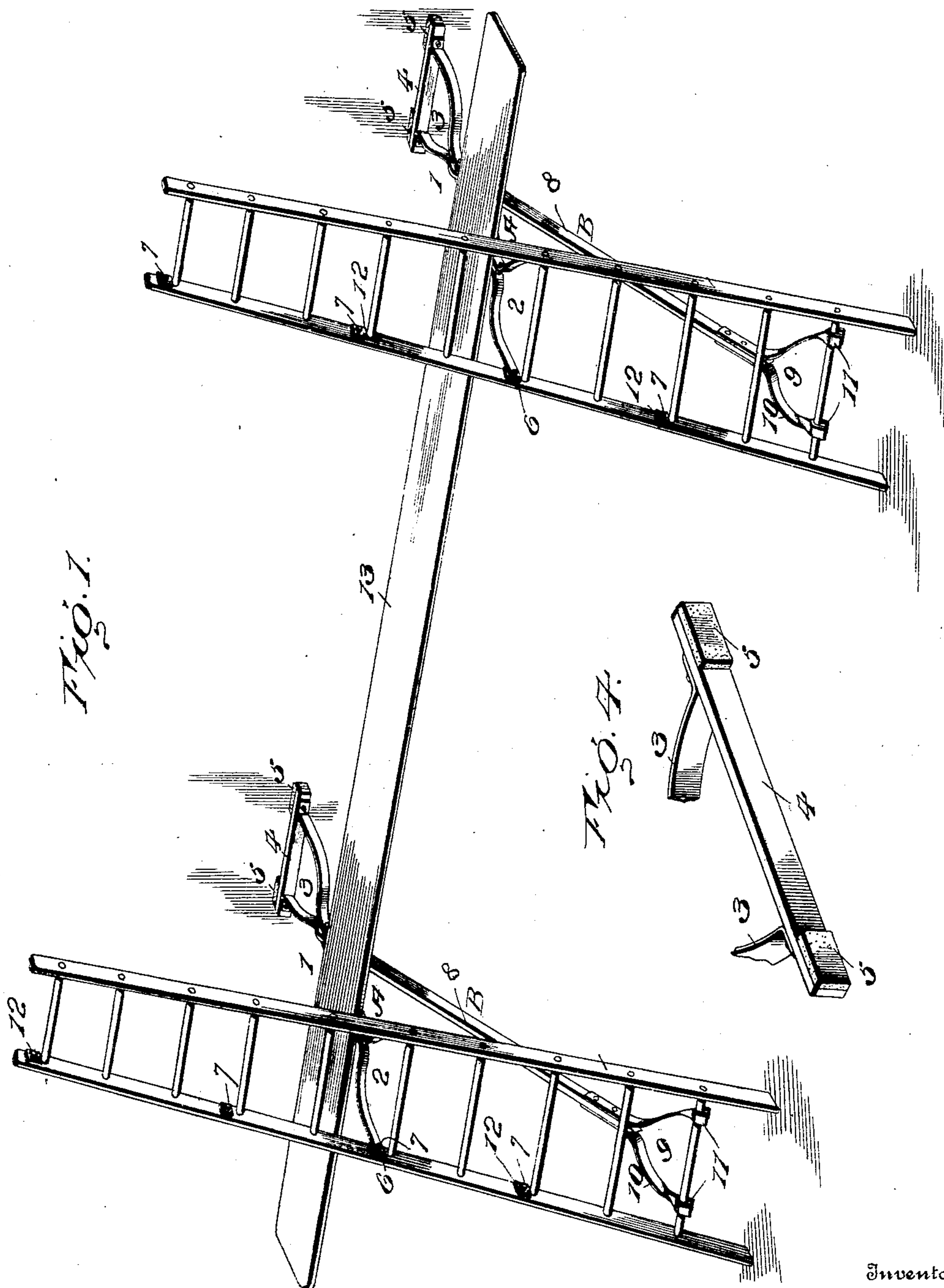
Patented Nov. 11, 1902.

**A. L. & E. D. STILES.**  
**SCAFFOLD.**

(Application filed July 5, 1902.)

(No Model.)

2 Sheets—Sheet 1.



Inventor,

*A. L. Stiles.*

*E.D. Stiles:*

Witnesses

Joe Marie  
Gladys L. Thompson.

ସିଦ୍ଧ

By  
R. L. & C. Lacey, Attorneys.  
715.

No. 713,358.

Patented Nov. 11, 1902.

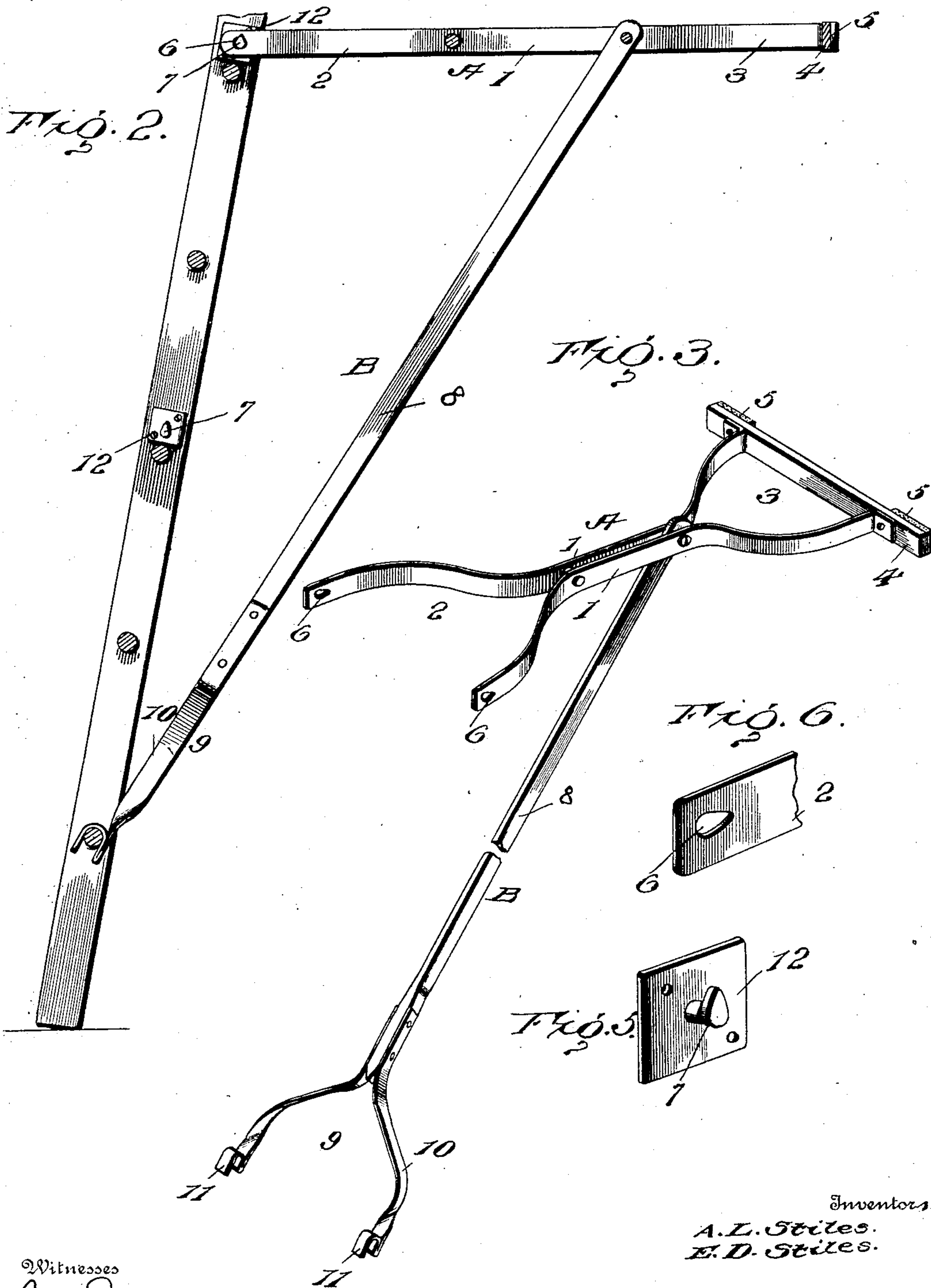
A. L. & E. D. STILES.

SCAFFOLD.

(Application filed July 5, 1902.)

(No Model.)

2 Sheets—Sheet 2.



Witnesses

Johnnie  
Gladys L. Thompson

Inventors

A. L. Stiles.  
E. D. Stiles.

By

W. A. Racy, Jr. Attorney.



# UNITED STATES PATENT OFFICE.

ALONZO L. STILES AND ELBERT D. STILES, OF POSTVILLE, IOWA.

## SCAFFOLD.

SPECIFICATION forming part of Letters Patent No. 713,358, dated November 11, 1902.

Application filed July 5, 1902. Serial No. 114,504. (No model.)

*To all whom it may concern:*

Be it known that we, ALONZO L. STILES and ELBERT D. STILES, citizens of the United States, residing at Postville, in the county of Allamakee and State of Iowa, have invented certain new and useful Improvements in Scaffolds, of which the following is a specification.

This invention relates to scaffolding, and provides novel means for use in connection with a ladder to form a support for a board or rest upon which the workman may stand, so as to reach a point not otherwise accessible without scaffolding of some character. Ladders are a necessary adjunct of the building craft, and it is the purpose of this invention to provide a bracket attachment for a ladder which can be readily adjusted to any desired height and which when not in use may be folded or reduced to a compact form for convenience of handling and so as to occupy a minimum amount of space.

For a full description of the invention and the merits thereof and also to acquire a knowledge of the details of construction of the means for effecting the result reference is to be had to the following description and drawings hereto attached.

While the essential and characteristic features of the invention are susceptible of modification, still the preferred embodiment of the invention is illustrated in the accompanying drawings, in which—

Figure 1 is a perspective view of a scaffold embodying the invention, the same comprising a pair of ladders, a pair of bracket attachments applied thereto, and a board supported upon the brackets. Fig. 2 is a vertical central section of the bracket attachment, showing it applied to a ladder. Fig. 3 is a perspective view of the bracket attachment. Fig. 4 is a perspective view of the rear end of the board-support or horizontal member of the bracket. Fig. 5 is a detail perspective view of a lug applied to a riser or side piece of the ladder. Fig. 6 is a detail view of the attaching end of an arm of the board-support.

Corresponding and like parts are referred to in the following description and indicated in all the views of the drawings by the same reference characters.

The bracket attachment consists, essentially, of two parts—a board-support or horizontal member A and a brace B.

The board-support or horizontal member A comprises companion bars 1, connected midway of their ends and having their outer end portions flared, as shown at 2 and 3, the terminal portions of the flared ends 3 being outwardly bent and secured to a cross-bar 4, which is adapted to bear against the wall or other surface against which the scaffold may be placed. To prevent marring the wall, pads 5 are applied to the end portions of the cross-bar 4 and may be of any construction. The flared ends 2 are provided with elongated openings 6 for cooperation with headed studs 7, applied to the risers or side pieces 8 of the ladder at determinate points in their length. The flared ends 2 are adapted to be compressed or spread, as desired, so as to admit of their attachment to and detachment from corresponding studs 7. The bars 1 are thin and wide and are placed with their flat sides in opposition, so as to occupy a vertical position when the bracket is in service, thereby enabling the bars 1 to sustain vertical pressure.

The brace B comprises a bar 8 and a fork 9, the bar 8 being pivoted at its upper end between the bars 1, preferably by one of the bolts or fastenings connecting said bars 1. The fork 9 is composed of bars 10, bolted to opposite sides of the lower end portion of the bar 8 and curved in opposite directions and terminating in hooks or clips 11, which are adapted to engage over a rung of the ladder. The hooks or clips 11 possess a spring action, so as to grip opposite sides of the rung, to which the fork may be fitted, thereby preventing accidental disengagement of the brace from the rung when the bracket is properly fitted to the ladder.

The studs 7 may be secured to the side pieces or risers of the ladder in any substantial way and, as shown, may form a part of or may be applied to plates 12, which are fastened either by screws or bolts to said side pieces. The heads of the studs are elongated to conform to the elongated openings 6 in the flared ends 2 of the board-support A, and when placing the bracket in position or removing



it from the ladder it is necessary to turn the board-support A so as to lie about parallel with the ladder, and in this position of the board-support the openings 6 correspond with the heads of the studs 7 and admit of said heads passing readily through the openings. After the heads of the studs have passed through the elongated openings 6 the board-support A is turned so as to occupy an approximately horizontal position, thereby causing the heads of the studs 7 to sit crosswise of the elongated openings 6 and preventing casual withdrawal of the studs through said openings. When it is required to disengage the bracket from the ladder, the board-support A must be folded upward against the ladder to bring the openings 6 in line with the heads of the studs 7, when the ends 2 of the board-support may be disengaged from the studs, as will be readily comprehended. When the board-support A occupies an approximately horizontal position, the clips or hooks 11 at the lower end of the brace engage a rung of the ladder and the ladder inclines at its upper end toward the wall or surface against which the scaffold is placed. By locating the studs 7 at selected points in the length of the ladder the bracket may be raised or lowered, as required.

In order to enable a great extent of surface being reached, a number of ladders and bracket attachments may be employed, and, as shown in Fig. 1, two ladders and two brackets are provided, and a board 13 is placed upon the supports B and extends from one ladder to the other, so as to enable the surface between the ladders being reached.

Having thus described the invention, what is claimed as new is—

1. In combination with a ladder, and headed studs applied to the risers or side pieces thereof at intervals in their length, a bracket comprising a board-support and brace pivotally connected, the board-support comprising spaced end portions provided with elongated openings to make interlocking connection with any one of the sets of headed studs of the ladder and the brace having a clip at its

lower end to engage with a rung of the ladder, substantially as set forth.

2. In combination with a ladder, and headed studs applied to the side pieces or risers of the ladder at intervals in their length, a bracket comprising a board-support and a brace pivotally connected, the board-support comprising spaced end portions having elongated openings to make interlocking connection with corresponding studs and the brace provided at its lower end with a fork having its members terminating in spring hooks or clips to make engagement with a rung of the ladder, substantially as set forth.

3. A bracket attachment for a ladder, the same comprising a board-support and a brace, the board-support being composed of companion bars connected intermediate of their extremities and having their end portions flared, one set of flared ends being adapted to make interlocking connection with the ladder and the brace having a fork at its free end terminating in clips or hooks for engagement with a rung of the ladder, substantially as described.

4. In combination with a ladder and headed studs applied to the risers or sides thereof at intervals in their length, a bracket comprising a board-support and a brace pivotally connected, the board-support comprising companion bars connected intermediate of their extremities and having their end portions flared, a cross-bar secured to a set of flared ends and having padding applied to its outer side and the other flared ends being provided with elongated openings to make interlocking connection with a set of studs of the ladder and the brace having a fork at its free end terminating in spring hooks or clips for engagement with a rung of the ladder, substantially as set forth.

In testimony whereof we affix our signatures in presence of two witnesses.

ALONZO L. STILES. [L. S.]

ELBERT D. STILES. [L. S.]

Witnesses:

WM. H. OEHRINGS,

F. WILKE.