

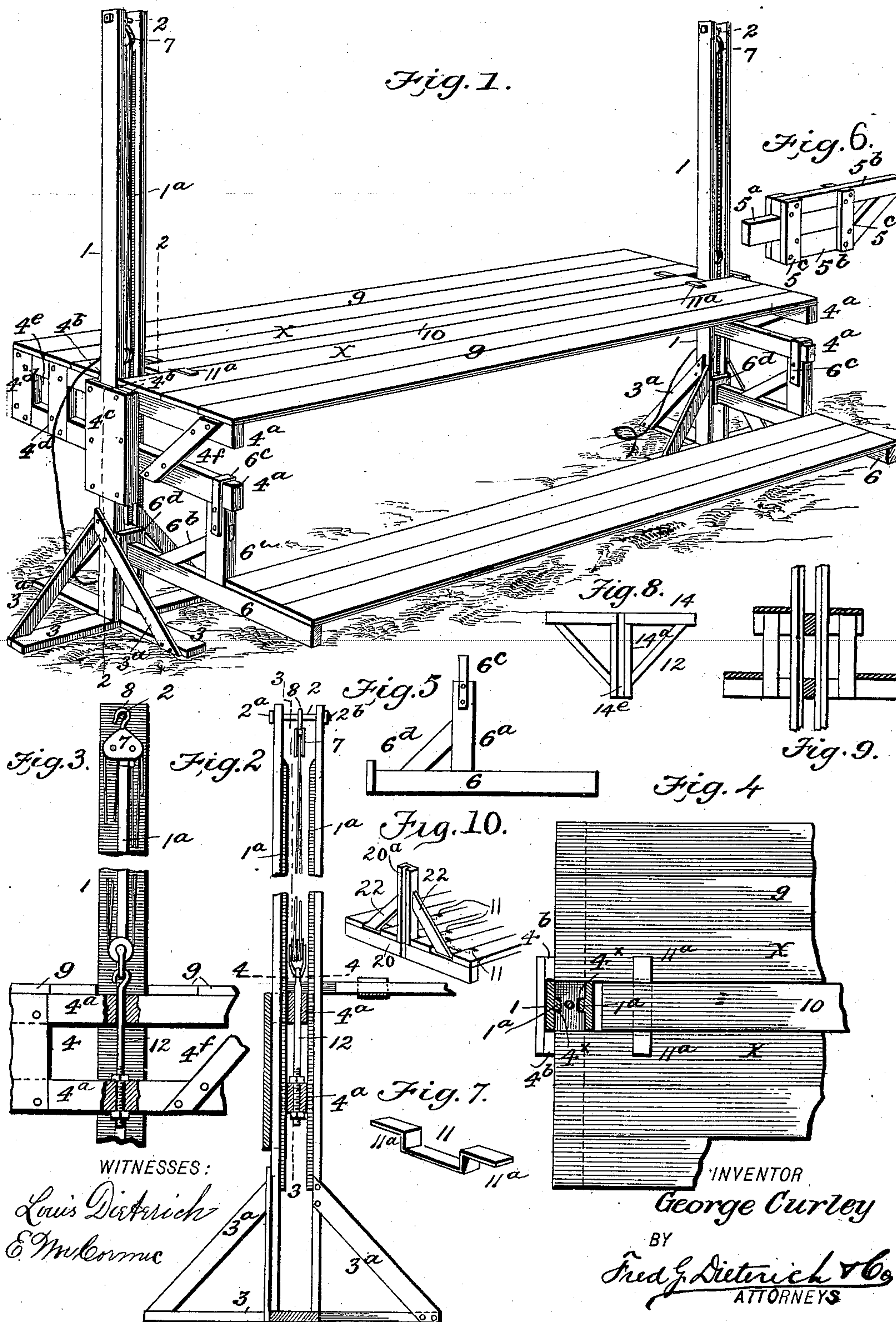
No. 657,396.

Patented Sept. 4, 1900.

G. CURLEY.
SCAFFOLD.

(Application filed Apr. 12, 1900.)

(No Model.)



UNITED STATES PATENT OFFICE.

GEORGE CURLEY, OF SALT LAKE CITY, UTAH.

SCAFFOLD.

SPECIFICATION forming part of Letters Patent No. 657,396, dated September 4, 1900.

Application filed April 12, 1900. Serial No. 12,607. (No model.)

To all whom it may concern:

Be it known that I, GEORGE CURLEY, residing at Salt Lake City, in the county of Salt Lake and State of Utah, have invented a new and Improved Scaffold, of which the following is a specification.

My invention relates to improvements in that class of portable scaffolding comprising, essentially, a pair of standards, in each of which is held for vertical movement brackets for supporting the mason's platform, which also includes suitable elevating mechanism capable of being manipulated by the mason for elevating his platform as may be desired.

In its general nature my invention comprehends a simplified arrangement of platform, supporting brackets slidable upon the standards and in combination therewith supplemental bracket members capable of being readily suspended from the mason's-platform-supporting brackets and having a simple arrangement of abutment shoes or blocks adapted to engage the standards, freely slidable on the outer surface thereof and adapted to serve as positive bracing means for holding the said supplemental brackets (intended to support the hod-carrier's platform) securely in position without the aid of screws, bolts, and other like securing means.

My invention also includes in its complete make-up a form of bracket slidable vertically within a slotted standard, the front end of which is peculiarly constructed to form a practical and simple supporting means for detachably-held endwise-projecting brackets adapted to support corner or return-platform sections and having its rear or other end constructed to support a pendently-hung hod-carrier's-platform-supporting bracket.

In its more subordinate features my invention consists in certain novel combination of parts and details of construction, all of which will be first described and then specifically pointed out in the appended claims, reference being had to the accompanying drawings, in which—

Figure 1 is a perspective view of a scaffolding constructed in accordance with my invention. Fig. 2 is a transverse section of the same on the line 2 2 of Fig. 1. Fig. 3 is a detail section taken practically on the line 3 3 of Fig. 2. Fig. 4 is a horizontal section of

one of the scaffolding ends, taken on the line 4 4 of Fig. 2. Fig. 5 is an end view of the hod-carrier's-scaffold-supporting platform. Fig. 6 is a perspective view of one of the return-platform brackets hereinafter referred to. Fig. 7 is a detail view of one of the center-board bridge-supporting members. Figs. 8 and 9 are detail views of modified forms of bracket hereinafter referred to, and Fig. 10 is a view of a further modification of the bracket hereinafter described.

Referring now to the construction illustrated in the drawings, in which like numerals indicate like parts in all the figures, the same includes in its make-up a pair of standards 1 1, which consists of two like side members, the upper ends of which are braced by a transverse rod 2, having a head 2^a at one end, its other end terminating in a nut-receiving portion 2^b, the said rod also acting as the upper support for the elevating devices presently referred to. The lower ends of the standard members are joined with the transverse foot portions 3 and braces 3^a, that form a solid base for the said standards. Upon the inner side each standard member has a vertical tongue 1^a, that extends nearly the full height of the standards; and the said tongues form guides for steadying the slidable brackets 4, as best shown in Fig. 4.

Within each standard is held for vertical movement a bracket member 4, which I shall hereinafter term the "mason's-scaffold bracket," and each of the brackets 4 comprises a pair of timbers 4^a, held in a like vertical plane and having a width to snugly fit the space between the two standard members in which they slide and to steady the movement of the said brackets 4 in their vertical movement, and also to more firmly hold them to their adjusted positions the fixed vertical edges of the said brackets are grooved, as indicated at 4^x, to engage the tongue 1^a of the standard members, (see Figs. 2 and 3,) and to still further hold the said brackets on the standards the outer sides of the two timbers 4^a are connected by vertical bars 4^b, so spaced apart as to snugly ride upon the front and rear edges of the outermost one of the two members that constitute the standard, an additional holding means in the nature of a cap-board 4^c being also provided, which

board is nailed to the outer edges of the bars 4^b to closely lap or travel over the outer face of the outermost one of the standard members, as clearly shown in Fig. 1. The front ends of the timbers 4^a are joined by short vertical bars 4^d, which add strength to the brackets and also form sockets 4^e for the heel portion 5^a of corner or return-platform brackets 5, one of which is shown in Fig. 6, and consists of the short horizontal beams 5^b, the vertical bars 5^c, and the heel portion 5^a, before referred to.

By constructing the brackets 4 in the manner described and providing the brackets 5 a simple, quickly-adjusted, safe, and effective means is produced for forming supports having end or corner return-scaffold sections.

The rear ends of the brackets 4 are left open, and the said ends are braced by the diagonal bars 4^f. The object in leaving the extreme ends open is to permit of a quick attachment of the hod-carrier's-platform-supporting brackets. These brackets each consist of a base member 6, a vertical member 6^a, projected upward, and a forwardly-projecting brace-bar 6^b, that connects with the member 6^a, a bearing block or shoe 6^d also forming a part of the brackets 6, the same being secured upon the front end of the base-timber 6, said shoe having a width at least equal that of the width of one of the standards.

To the upper end of the member 6^a is made fast a □-shaped iron or clip 6^c, the function of which will be readily understood by referring to Fig. 1.

Any suitable means may be provided for lifting the scaffold-supporting brackets operative from the mason's scaffold, but I prefer to use the means illustrated in the accompanying drawings, which consist of a grip-block and tackle and the upper or supporting block 7, having a hanger-hook 8, that engages and is hung upon the hook 2 at the top of the standards.

8^a designates a grip-block of any suitable construction.

In the practical application of my invention planks 9 are laid upon the front and rear extensions of the brackets 4 to brace the mason's scaffold, and the said boards 9 extend beyond the inner edges of the standards, as shown, and to close up the space between the innermost long planks X X a shorter board 10 is held in the said space flush with the remaining planks, which board is supported upon L-shaped hangers 11, the ends of which terminate in horizontally-extending ears 11^a, that rest upon the upper face of the adjacent edges of the planks X X, as clearly illustrated in Fig. 1. The boards having been properly laid upon the masons' brackets 4 and the said bracket, for example, being near the ground, the masons work thereon until it becomes necessary to raise the said brackets and scaffold supported thereon, which is then done by manipulating the block-and-tackle members, which, by reason of the

brackets 4 being supported thereon by the rods 12, that pass centrally through the upper and lower members of the brackets 4, as best shown in Figs. 2 and 3, elevates the mason's platform to the desired height, it being understood that so long as the mason's scaffold is not shoulder-high the brackets 6 need not be used. Now after the mason's scaffold has been lifted so high that a hod-carrier cannot conveniently throw the material thereon, the brackets 6 are hung onto the rear free end of the brackets 4, and with their shoe portions made to bear firmly against the rear faces of the standards 1, it being manifest that by this arrangement of parts it is impossible for the hod-carrier's scaffold to become loosened from the brackets 4 under ordinary uses. Furthermore, by forming the hod-carriers' brackets in the manner shown I am enabled to secure a very strong and effective support for the hod-carrier's scaffold and at the same time effectively brace the same against separating from the brackets 4, making it, as it were, a very simple, quickly-adjustable, and effective means for connecting the hod-carrier's-scaffold brackets to the mason's-scaffold brackets without the use of bolts, nuts, and screws, or other fixedly-held fastening means.

When it is desired to make a return at the corner and support a platform thereon, it is only necessary to insert the heel portion of the brackets 5 into the opening made at the front ends of the brackets 4.

My invention is exceedingly simple, and while I have described it as being especially adapted for masons' and bricklayers' uses, &c., I desire it understood that the same with little or no modification can be readily employed as scaffold for ordinary uses, and, for example, for light uses around houses, stores, &c., and the special bracket, such as illustrated by 8, may be provided, which consists of a single transverse timber 14 and a central pendent member 14^a, having grooves 14^c in its edges to engage with the tongues upon the inner sides of the standards having forwardly and rearwardly inclined brace-bars, as shown.

In Fig. 9 is illustrated a further modification of the scaffold, which is especially adapted to be used in place of the latter and may be made of suitable light material.

From the foregoing description, taken in connection with the accompanying drawings, it is thought the manner in which my improved scaffold may be used will be readily understood by those skilled in the art to which it appertains. The same is of an exceedingly simple nature, and the parts can be readily assembled for use and the entire device, both the mason's scaffold and the hod-carrier's scaffold, elevated by the mason manipulating the hoisting-tackle. It will be of course understood that the hod-carrier's scaffold is supported sufficiently below the mason's scaffold, so that the hod-carrier can throw the material shoulder-high onto the mason's scaffold.

fold. Furthermore, in practice the hod-carrier's scaffold projects sufficiently out from the mason's scaffold as to permit the ready use with the said hod-carrier's scaffold of a run-
5 way.

Fig. 10 illustrates another form of bracket adapted for use with my arrangement of elevating mechanism. This bracket (indicated by 20 in the drawings) has its ends arranged
10 to project upward from the scaffold-supporting beams 20 instead of downward, as is the case with the brackets 4, and the guide or lift studs 20^a of the said brackets 20 are braced at the sides by diagonal timbers 22. In this
15 form of bracket three yoke-frames 11 are necessary at each end for properly supporting the scaffold-planks, as clearly shown in Fig. 10. This type of bracket is especially useful for elevating wheelbarrows carrying
20 brick or other material, as the scaffold-platform can be brought down flush with the ground to permit the wheelbarrows being readily run on or off, and thereby dispense with runways.

Among other advantages my improved scaffold and elevating devices will be found useful in brick-yards for brick-setters piling green brick and when discharging the burned kiln the upper brick can be lowered by means
25 of one section of my scaffolding, saving, as it were, the service of the man who usually passes the brick from one workman to another.

While I have not so illustrated it, the form
35 of brackets shown in Figs. 8 and 10 may be equipped with the end guide or stay members 4^c to steady the brackets as they slide up and down the standards 1.

Having thus described my invention, what
40 I claim, and desire to secure by Letters Patent, is—

1. A scaffold, comprising in combination a pair of supporting-standards and mason's-platform-carrying brackets vertically movable on each standard, means for elevating
45 the said brackets, each of the said brackets having a forwardly-extending portion and a rearwardly-extending portion, a hod-carrier's platform adapted to be detachably hung from the mason's platform, said hod-carrier's platform including a supporting-bracket having means for hanging pendently from the mason's-platform bracket, and a shoe adapted to slidably engage the standard, as set forth.
50

2. In a scaffold, the combination with the standard comprising two parallel members each having a vertical tongue-piece on the inner face, a hanging bolt or loop mounted in the upper end of the two members; of a
55 bracket consisting of upper and lower horizontal timbers joined to move together, said timbers being adapted to extend transversely between the standard members and having grooves to engage the tongues on the said
60 members, the lift-rod 12, and the block-and-tackle devices connecting with the lift-rod 12

and the rod at the top of the standard, all being arranged substantially as shown and described.

3. The combination with the standards and
70 the mason's-platform-supporting brackets, vertically movable on the standards, means for elevating the said brackets, said brackets each extending forwardly and rearwardly of the standards; of a hod-carrier-platform
75 bracket, consisting of a base member having a shoe adapted to slidably bear against the standard and a member projected vertically from the base member midway thereof, the upper end of said vertical member having a
80 clip or socket portion whereby it can be detachably hung from the mason's-platform-supporting bracket, as specified.

4. In a scaffold as described, the combination with the standard formed of two parallel
85 members having a suitable base connection, and a hanger-rod at the top; of a bracket consisting of the two bars 4 4^a, adapted to extend transversely between the standard members, the vertical bars 4^b 4^b connecting the bars 4^a,
90 and forming guides to engage the edges of the standard; the lift-rod 12 and the block-and-tackle devices connected to the lift-rod and to the top hanger all being arranged substantially as shown and described.
95

5. The hereinbefore-described scaffolding, consisting of a pair of standards each formed of parallel members connected to the suitable base and having a transversely-disposed
100 hanger-rod at the top, the inner faces of the parallel members having vertical guide-tongues, the brackets 4, consisting each of an upper and a lower bar 4^a adapted to pass transversely through the standards and having
105 grooves at the sides to engage the tongue of the standards, said brackets also having external guide-bars 4^d, engaging the edges of the standards, the rearwardly-extending portions of the said brackets being free whereby to form bracket members, the brackets 6,
110 each having a vertically-projecting member 6^a, provided with a clip or cuff member 6^c, adapted to slip over the free end of the lower bar 4^a, of the brackets 4, the forward end of the bracket 6, having a shoe 6^d, adapted to
115 engage the sides of the standard, and the block-and-tackle devices for elevating the brackets, all being arranged substantially as shown and described.

6. In a scaffold of the character described,
120 the combination with the standards and the brackets 4, vertically movable thereon, said brackets having vertical sockets at the forward end, of the end brackets 5, said brackets having heel portions 5^a, adapted to en-
125 gage the sockets in the forward end of the brackets 4, all being arranged substantially as shown and described.

GEORGE CURLEY.

Witnesses:

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J. E. CLINTON.