

(No Model.)

2 Sheets—Sheet 1.

A. BITTERLY.
SCAFFOLDING.

No. 403,636.

Patented May 21, 1889.

Fig. 1.

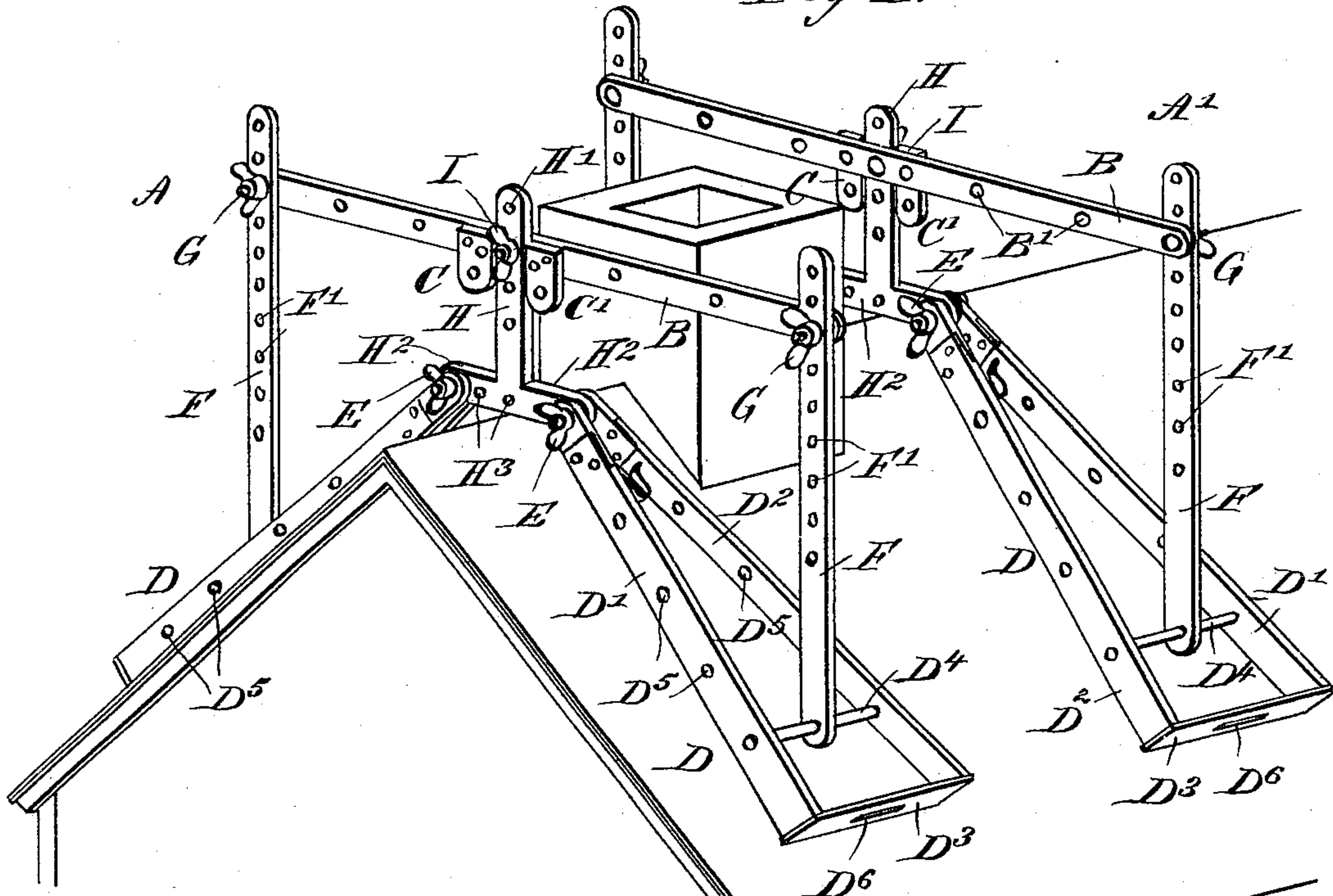


Fig. 2.

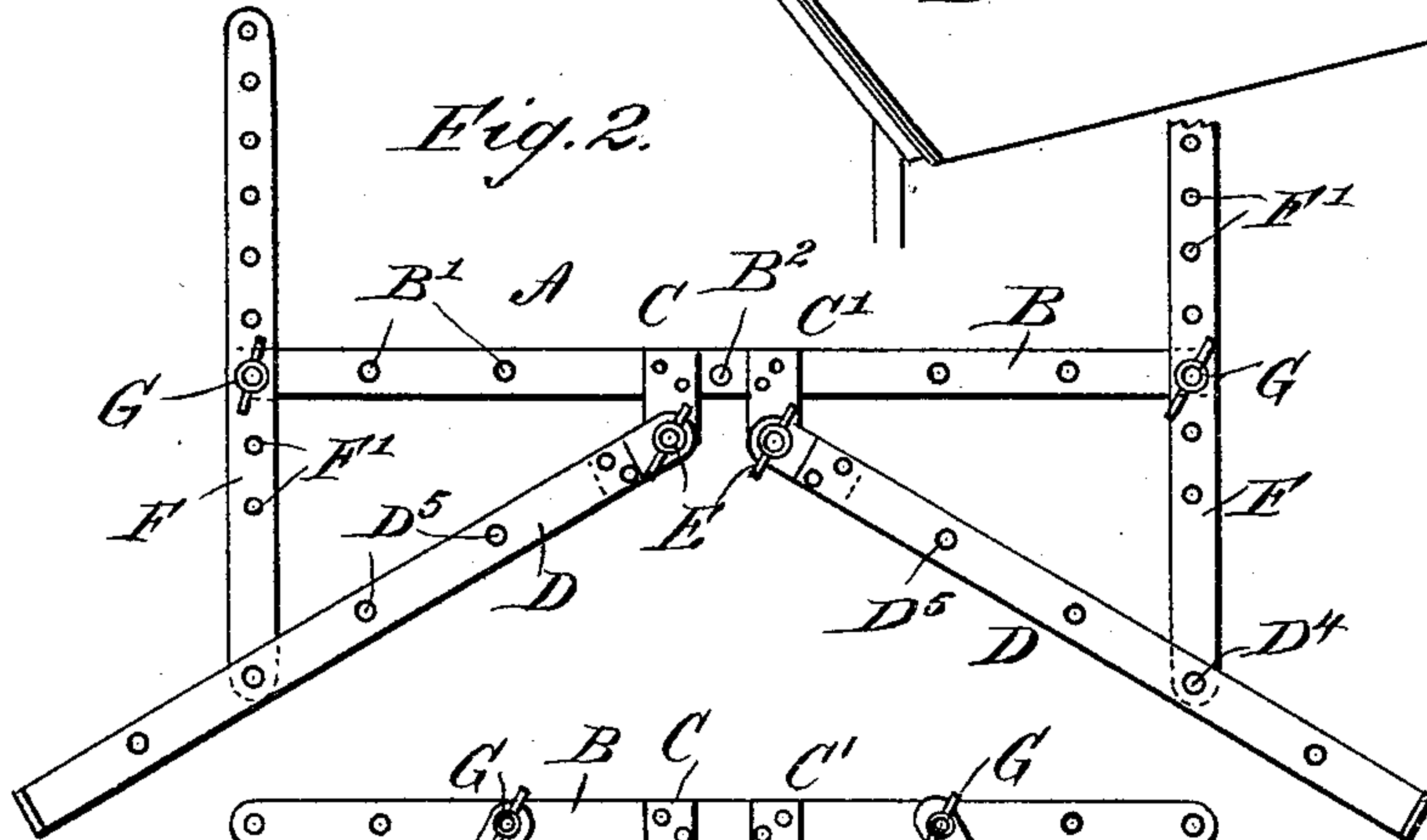


Fig. 3.

WITNESSES:
Norm Twitchell
to bedgwick

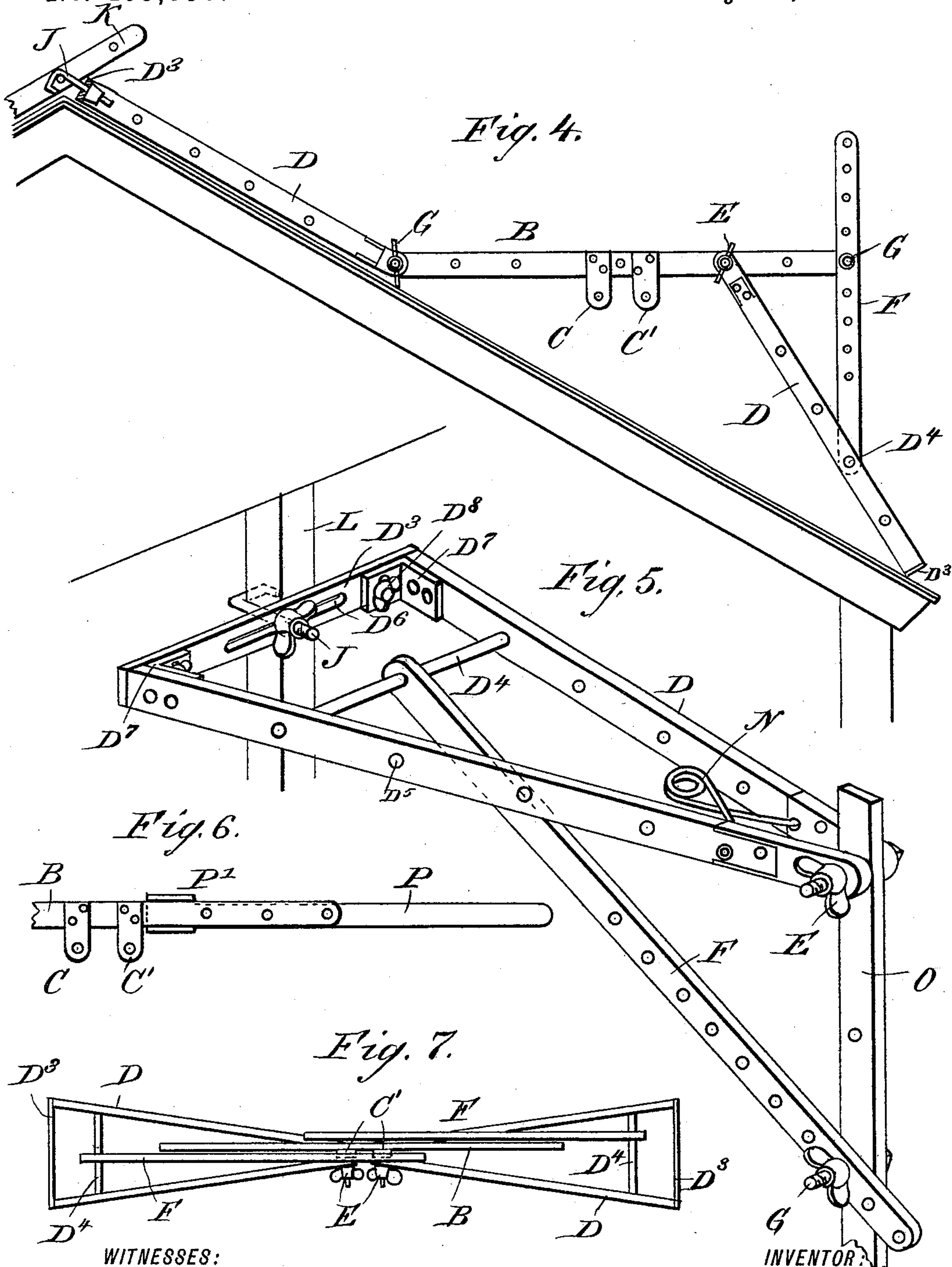
INVENTOR:
A. Bitterly
BY *Munn & Co*

ATTORNEYS.

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WITNESSES:

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UNITED STATES PATENT OFFICE.

ADOLPH BITTERLY, OF OTTAWA, ILLINOIS.

SCAFFOLDING.

SPECIFICATION forming part of Letters Patent No. 403,636, dated May 21, 1889.

Application filed October 2, 1888. Serial No. 286,939. (No model.)

To all whom it may concern:

Be it known that I, ADOLPH BITTERLY, of Ottawa, in the county of La Salle and State of Illinois, have invented a new and Improved Scaffolding, of which the following is a full, clear, and exact description.

The object of the invention is to provide a new and improved scaffold adapted for building chimneys, for plastering, for painting rooms and walls, and for other purposes, being simple in construction and easily set up or taken down, as desired.

The invention consists of certain parts and details and combinations of the same, as will be fully described hereinafter, and then pointed out in the claims.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar letters of reference indicate corresponding parts in all the figures.

Figure 1 is a perspective view of the improvement as applied to a gable-roof. Fig. 2 is a side elevation of the same. Fig. 3 is a like view of the same in a different position. Fig. 4 is a similar view of the same with parts in section and as used for staging on the roof. Fig. 5 is an enlarged perspective view of the improvement as used for staging on the side of the house. Fig. 6 is a side elevation of the cross-piece with an extension, and Fig. 7 is a plan view of the improvement as folded up.

The improved scaffold consists of the two parts A and A', which are alike in construction, each being provided with a cross-piece, B, having a row of apertures, B', and the downwardly-extending lugs C and C', formed near the middle of the said cross-piece. The lower ends of the lugs C and C', in the form of scaffold shown in Fig. 2, are pivotally connected with the legs D by means of the bolts E, passing through the said lugs C and C' and the respective legs D. Each of the legs D is triangular in shape, consisting of the side beams, D' and D², and the end beam, D³, the apex of the triangle of each leg D being secured by the bolt E to the respective lug C or C'. The side beams, D' and D², support a transverse rod, D⁴, passing through corresponding apertures, D⁵, formed in the side beams, D' and D². The end beam, D³, is preferably fastened to the side beams by means

of angle-irons D⁷, secured by one wing to the end beam and by its other wing, by bolts D⁸, to the end beam, D³, as shown in Fig. 5.

On the rod D⁴ in each of the legs D of the scaffold shown in Figs. 1 and 2 is held one end of a supporting-beam, F, connected by a bolt, G, with the respective end of the cross-piece B, said bolt G passing through one of the apertures F' in the said supporting-beam F and a corresponding aperture, B', in the cross-piece B. The device, when disconnected, can be set to the pitch of any roof, one leg D being on one side and the other leg on the other side of the roof, the cross-piece B extending horizontally across the ridge-piece at right angles to the same. When two devices are thus set up, boards are placed across the tops of the cross-pieces B, thus forming a complete scaffold for the operators to stand and work on.

In order to raise or lower the platform formed by the boards, (see Fig. 1,) I employ a T-piece, H, adapted to pass between the lugs C and C' and fastened by a bolt, I, in the middle of the cross-piece B. The transverse arm H² of the T-piece H is provided with apertures H³, through which pass the bolts E, supporting the legs D. The cross-piece H² of the T-piece H rests on the ridge-piece of the roof, as is plainly illustrated in Fig. 1. The apertures H' in the vertical arm of the T-piece H permit a raising and lowering of the cross-piece B, and the latter is adjusted in the apertures F' of the supporting-beams F to correspond to the raising or lowering on the vertical arm of the T-piece H.

When it is desired to form a platform in a room, for instance, then the cross-piece B is pivotally connected by its lugs C C' with the supporting-beams F, as is plainly shown in Fig. 3, and the legs D are pivotally connected with the said supporting-beams F and the cross-piece B. The end pieces, D³, of the legs D rest on the floor, thereby supporting the entire device. The planks or boards are placed across the cross-pieces B in the same manner as before mentioned in reference to Figs. 1 and 2.

As illustrated in Fig. 4, the device is employed for forming a platform on the side of a roof for building a chimney or for other

purposes. In this case the cross-piece B is pivotally connected at one end to one of the legs D, laid flat on the roof, and provided at its transverse end D³ with a hook, J, hooked
 5 onto a scaffolding, A, placed on the other side of the roof. The cross-piece B is also pivotally connected with the other leg D, the lower end of which rests on the side of the roof, and the outer end of the cross-piece B is pivotally
 10 connected to one of the supporting-beams F, held, as before described, on the rod D⁴ of the inclined leg D. The cross-pieces B extend horizontally, thus forming a horizontal platform by placing the planks across the said
 15 cross-pieces, as before described. It is understood that the various bolts G and E are inserted into the respective apertures so as to place the cross-piece horizontally.

As illustrated in Fig. 5, the device is applied to form a staging on the side of a house, and in this case one of the legs D forms the support for the planks used to make the platform. The cross-arm D³ of the leg D is connected by the hook J to one of the uprights L
 25 of the house, and the apex of the leg D is pivotally connected by the bolt E with a scantling, O, resting on the ground. The supporting-beam F in this case forms a brace and extends from the rod D⁴ to the scantling
 30 O, to which it is secured by a bolt, G. I prefer to place a spring, N, in the apex of each leg D, so as to press the sides D' and D² toward each other, thereby holding the said sides firmly in contact with the sides of the
 35 scantling O.

When the scaffold is set up in a room, as illustrated in Fig. 3, and the operator desires an extension at one side, he employs the extension-beam P, provided with lips P', fitting
 40 over the outer part of the cross-piece B, so that the said extension P can be moved in and out horizontally on the cross-piece B, to which it may be secured by a bolt, G. The cross-arm D³ of the legs D is provided with a
 45 longitudinal slot, D⁶, for the hook J.

When the device is to be folded up, the several bolts G are removed, thus disconnecting the cross-piece B from the supporting-beams F. The legs D can then be swung parallel
 50 with the cross-piece B, and the supporting-beams F are swung inward, also in a parallel position, as is plainly shown in Fig. 7.

The device may also be used for other purposes.

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

1. In a scaffold, a triangular leg comprising side bars, D' D², a cross-bar, D³, connecting the bars at one end, a rod, D⁴, connecting the
 60 side bars between their ends, and a removable clamping-bolt connecting the side bars at their opposite ends, and a bar, F, mounted at one end on the cross-rod D⁴ to swing in the plane
 65 of the leg and provided with a series of transverse apertures, F', and an intermediate transversely-apertured bar bolted to the bar F and connected with the clamping-bolt, substantially as set forth.

2. In a scaffold, a triangular leg comprising 70 side bars, D' D², a longitudinally-slotted cross-bar, D³, connecting said side bars at one end, a bolt connecting the opposite ends of the side bars, an intermediate cross-rod, D⁴, a hook-bolt, J, passed through said slot, an aper- 75 tured bar mounted at one end on said cross-rod, and an apertured bar detachably connected with the bar F and the said bolt, substantially as set forth.

3. A scaffold consisting in two triangular 80 legs or frames having removable bolts at their adjacent narrow ends, a cross-rod between their ends, apertured bars F, mounted on said cross-rods, and an apertured bar detachably connected between its ends with said bolts, 85 and at its ends bolted to the bars F, substantially as set forth.

4. A scaffold consisting in the two triangular legs or frames having cross-rods between their ends and removable bolts at their adja- 90 cent narrow ends, apertured bars F, mounted at one end on said rods D⁴, and the apertured cross-bar B, detachably connected between its ends by a T-shaped apertured bar, H, with said bolts, the vertical arm of said bar H be- 95 ing bolted to the bar B and the transverse arm to the legs, substantially as set forth.

5. The herein-described scaffold, consisting in the legs or frames D, having bolts E at their adjacent ends, cross-rods D⁴, the apertured 100 bars F, and the removable T-shaped apertured bar H, through the transverse arm of which said bolts pass, and the apertured bar B, having depending apertured lugs C C', between which the vertical arm of the bar H passes, 105 and a bolt detachably connecting said vertical arm with the bar B, substantially as set forth.

ADOLPH BITTERLY.

Witnesses:

ALBERT MUIERHOFER,
 LEO STAUFFER.