

(No Model.)

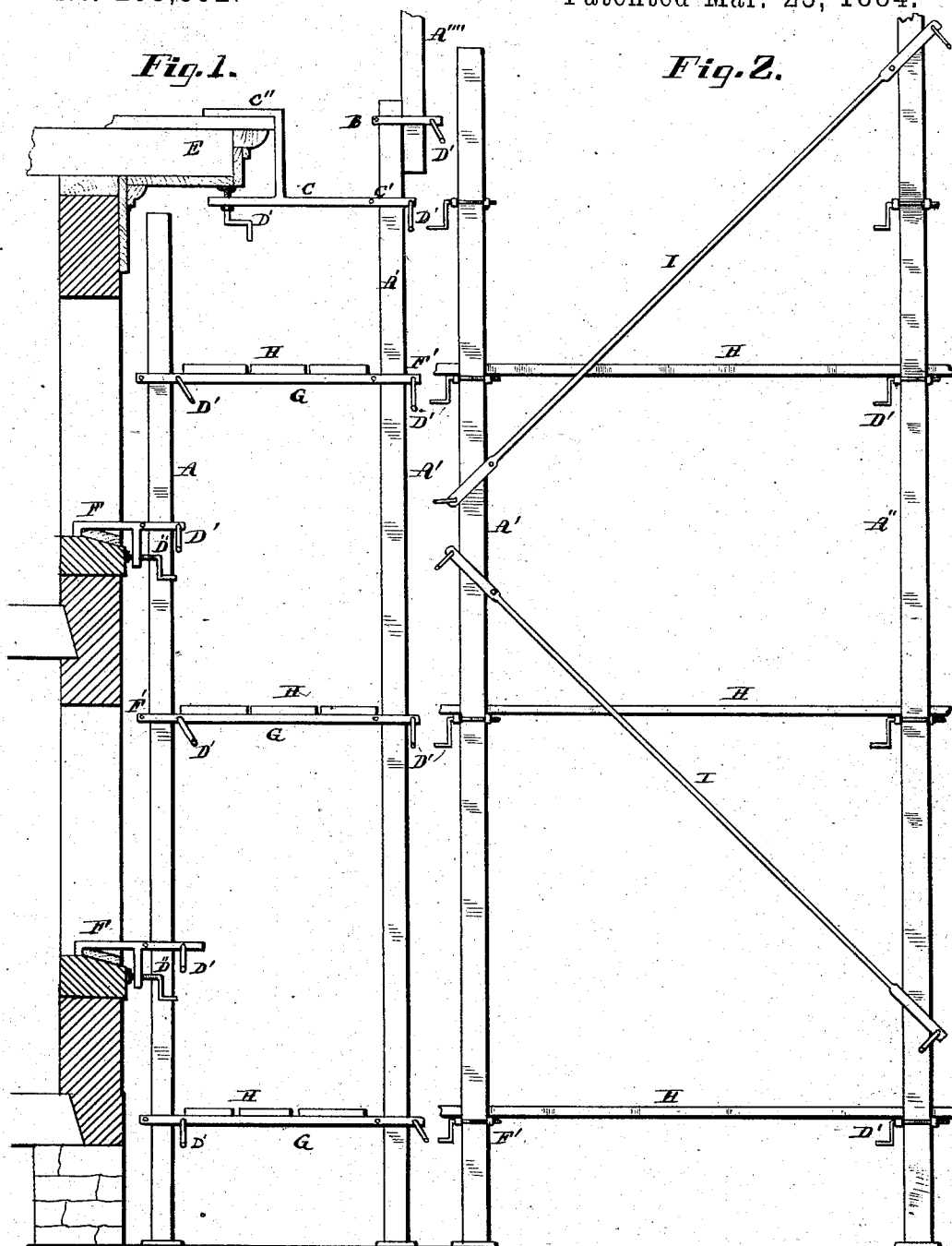
4 Sheets—Sheet 1.

T. N. SUBERS.

SCAFFOLDING.

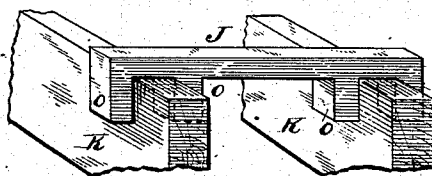
No. 295,592.

Patented Mar. 25, 1884.



WITNESSES:

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Edwin L. Jewell



INVENTOR

Fig. 3. Thomas N. Subers
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(No Model.)

4 Sheets—Sheet 2.

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Fig. 4.

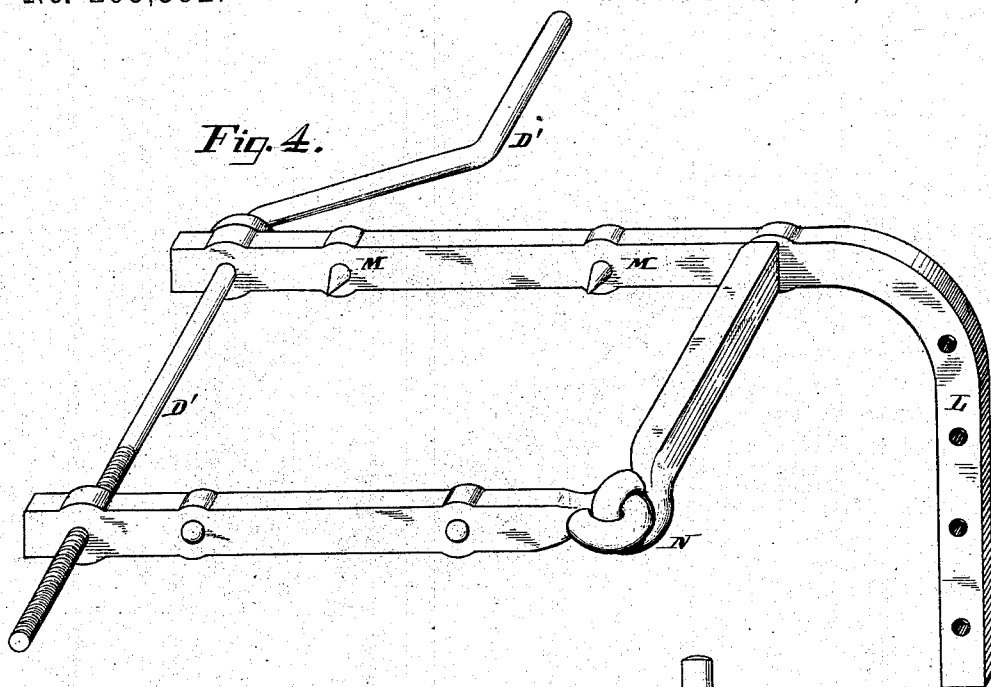


Fig. 5.

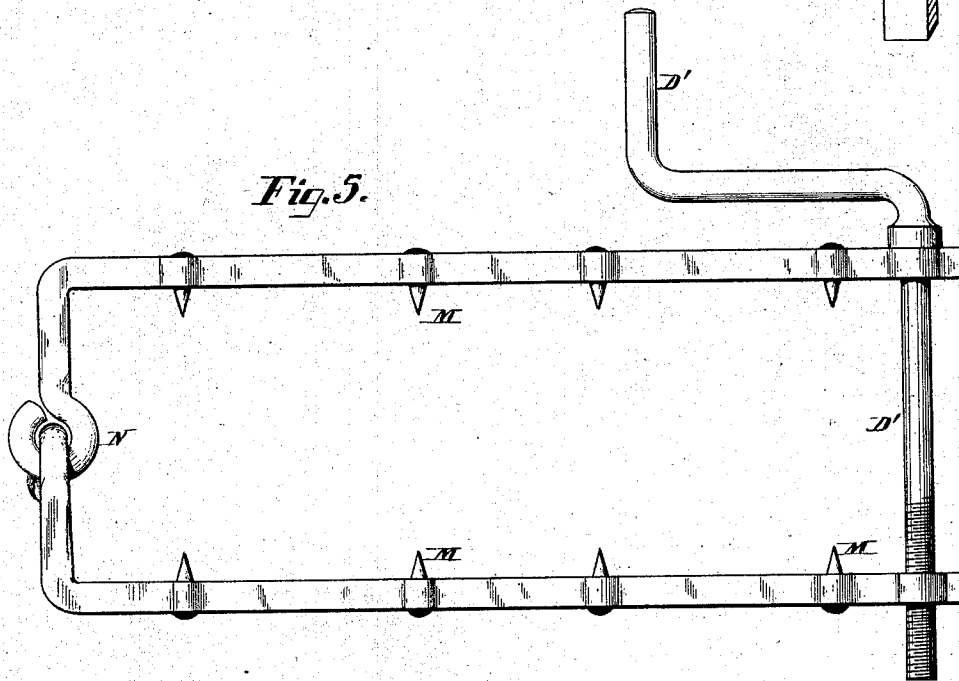
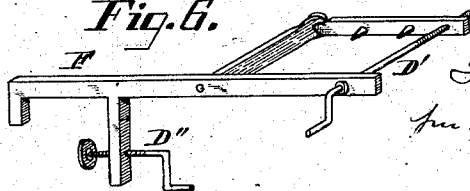


Fig. 6.



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(No Model.)

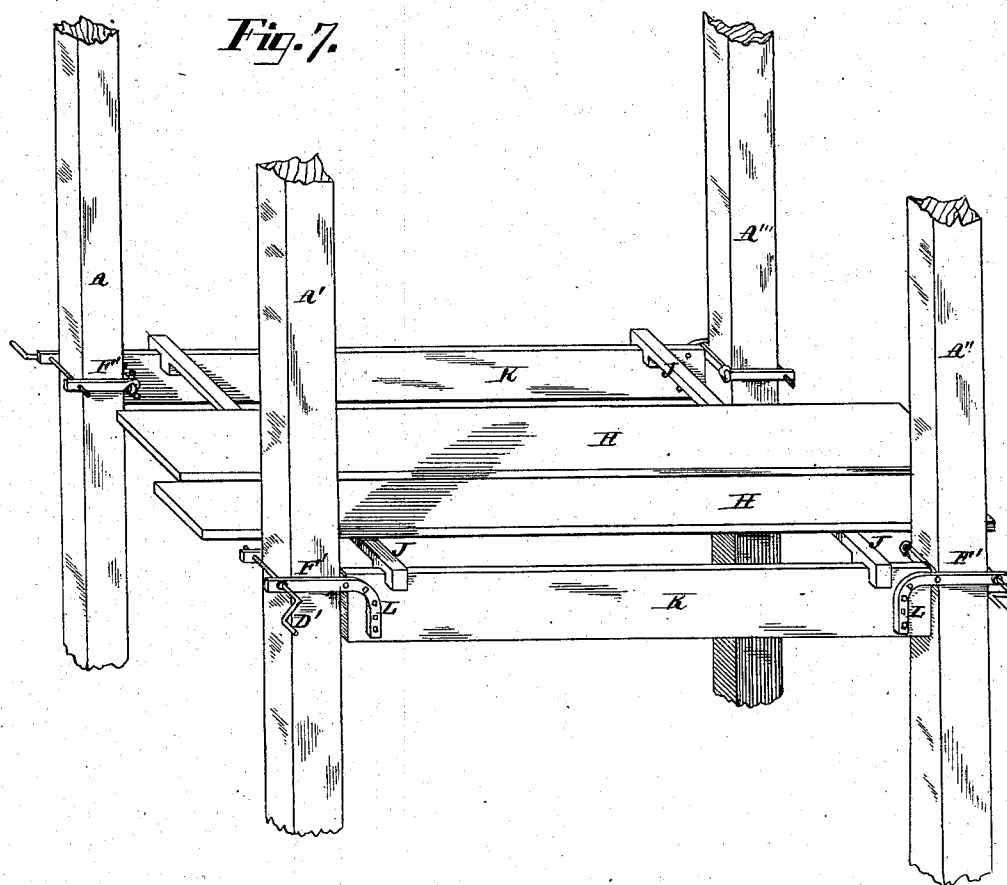
4 Sheets—Sheet 3.

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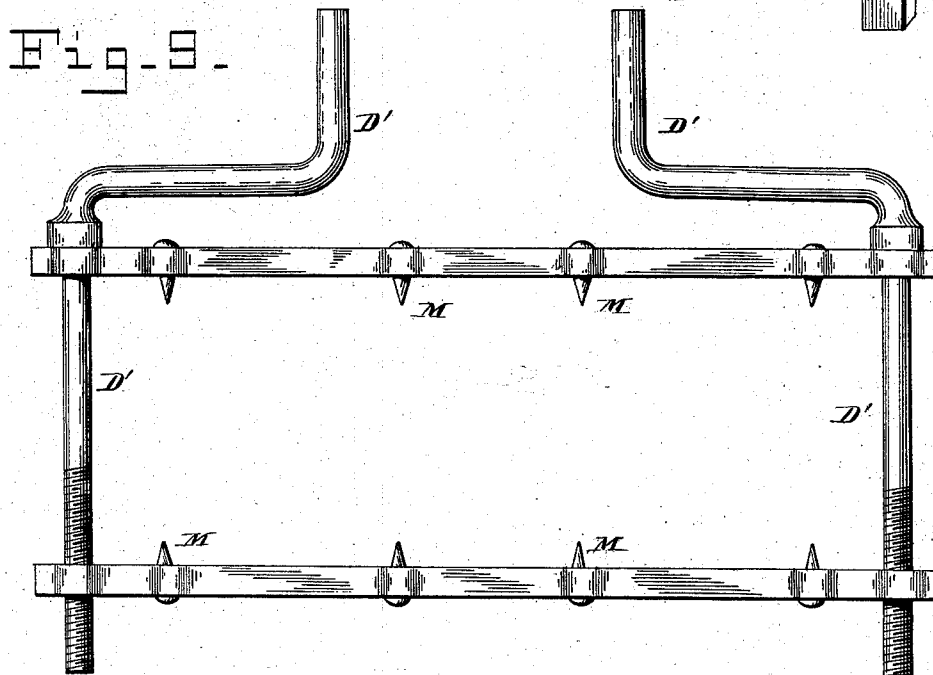
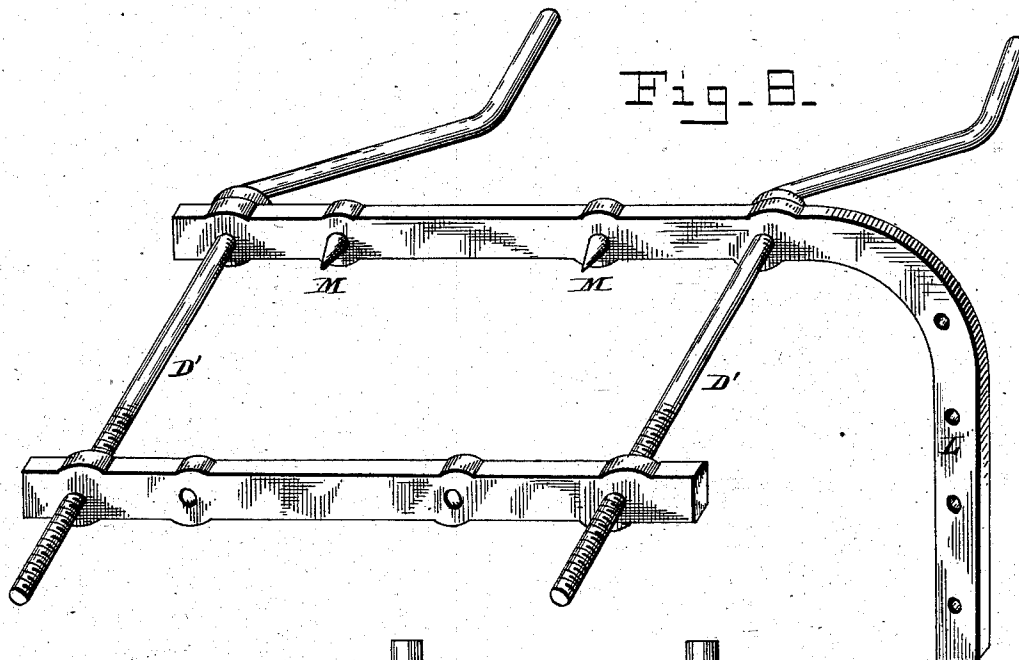
4 Sheets—Sheet 4.

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SCAFFOLDING.

No. 295,592.

Patented Mar. 25, 1884.



WITNESSES

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INVENTOR

Thomas N. Subers
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UNITED STATES PATENT OFFICE.

THOMAS N. SUBERS, OF PHILADELPHIA, PENNSYLVANIA, ASSIGNOR OF
ONE-THIRD TO GEORGE E. BUCKLEY, OF SAME PLACE.

SCAFFOLDING.

SPECIFICATION forming part of Letters Patent No. 295,592, dated March 25, 1884.

Application filed December 21, 1883. (No model.)

To all whom it may concern:

Be it known that I, THOMAS N. SUBERS, a citizen of the United States, and a resident of Philadelphia, Pennsylvania, have invented a new and useful Improvement in Scaffolding; and I do hereby declare the following to be a full, clear, and exact description of the same, reference being had to the annexed drawings, making part hereof.

The nature of my invention will fully appear from the following description and claims.

In the drawings, Sheet 1, Figure 1, is a side elevation of my device, showing the mode of attaching the same to the eaves of a roof and the window-sill of a building; Fig. 2, a front elevation of my scaffolding; Fig. 3, a detached perspective view of one of my cross-clamps, showing broken portions of two ledger-boards.

Sheet 2: Fig. 4 is a perspective view of one of my square clamps, showing the gripping-points and the goose-neck for attachment to the ledger-boards; Fig. 5, a plan view of my splicing-clamps; Fig. 6, a perspective of one of my clamps, showing the device for attaching the same to a window-sill. Sheet 3: Fig. 7 is a perspective view of a section of my scaffolding, showing the uprights, ledger-boards with their securing-clamps, the cross clamps or bars, and the working boards or platform; and

Sheet 4, Figs. 8 and 9 are views of my clamps similar to those shown in Sheet 2, Figs. 4 and 5, excepting that the screw-threaded rods are at both ends of the clamps, instead of being only at one end.

In Fig. 1, A A' A'' are the uprights of my scaffolding; A'', a continuation of the upright A', spliced thereto, and secured by the square clamp B.

C, Fig. 1, is a clamp for attaching the scaffolding to the eaves E of the roof of the house or building by means of the elbow C' and the screw-threaded crank D. This clamp or elbow C is attached to the scaffolding by means of a square clamp or socket, C', and a screw-threaded crank, D'. The inner uprights, A, are held up close to the front of a house or building by means of the hooked or bent clamps F, which are secured around the upright by means of square clamps or sockets and screw-cranks D', and hooked to the window-ledge, to

which they are secured by the screw-crank D'.

In Fig. 1, G represents supporting bars or rests for the working boards or platform H.

I I, Fig. 2, are strengthening-braces for the scaffolding, secured to neighboring uprights, as shown.

J J, Figs. 3 and 7, are cross-clamps, gripping the ledger-boards K K, and are designed, like the cross-bars G, to sustain working boards or platform H. The ledger-boards K K (see Fig. 7) are secured to the uprights A, A', A'', and A''' by means of the square clamps F' F', which in their turn are fastened to the ledger-boards by goose-necks L, which are secured to the latter by screw-bolts or rivets.

The interior surfaces of all my square clamps are furnished with the gripping-points M, (see Figs. 4 and 5,) and all my square clamps are hinged, as shown at N N, Figs. 4 and 5. These gripping-points M M stick into the uprights when the clamp is drawn together by means of the screw-thread upon crank D', and the clamp is thus prevented from slipping up and down on the upright.

In Fig. 1, I have shown a splice at B with only one clamp. In practice I shall use two clamps in making a splice in the upright.

O O, Fig. 3, are downwardly-projecting lugs or clasps from the clamp J, to stay and hold the clamp J in place when the latter is set across or bridged upon two ledger-boards K K.

My scaffolding is erected as follows: Referring to Fig. 7, the four uprights A A' A'' A''' are set up, and the clamps F' F' F' F' are secured around the respective uprights in the manner shown, the inwardly-projecting points M M (see Fig. 4) biting into the timber and holding the clamps securely in place. Between each two front uprights, A' A'', and between each two back uprights, A A''', pass ledger-boards K K, these ledger-boards being secured to the clamps by means of the goose-necks L L upon the latter. The cross bridging clamps or braces J J are then laid from the front ledger-board to the rear one, clasping each of these ledger-boards, as illustrated in Figs. 3 and 7, and the working-boards H H are then laid upon clamps J J. (See Fig. 7.) These working-boards constitute a platform for the workmen to stand upon, the

weight being sustained by the clamps F' F', which not only constitute tight-clasping collars held rigidly in place by the screw-threaded bar D', but which, in addition to their tight grasp thus attained, are also secured from slipping by the points M M. Now, if it is desired to splice additional lengths to the uprights A A' A'' A''', as shown at B, Fig. 1, a clamp similar to that shown at Fig. 5, Sheet 2, is used, and the overlapping ends of the two timbers or uprights are firmly held together. In practice I employ two of such clamps at each overlapping joint to insure rigidity.

Whenever it becomes necessary to secure the scaffolding to a window-ledge, the desired result is accomplished by employing a combined hook and loop clamp, such as is shown in Fig. 6, Sheet 2. The hook F grasps the window-ledge, as shown in Fig. 1, and the screw-clamp D'', passing through a downwardly-projecting lip, as shown, serves to secure the hook tightly in place.

When it becomes necessary to secure the scaffolding to the roof, it is done in the manner shown in Fig. 1, the clamp being of the form shown at C C' C'', C' being the loop portion of the clamp, which embraces the upright A', C the arm of the clamp, and C'' an upwardly-extending elbow to rest upon the top of the cornice of the house. The clamp is secured rigidly to the cornice by means of the screw-threaded crank D'. These screw-threaded cranks, as shown in Figs. 4 and 5, Sheet 2, consist of a screw-threaded rod terminating in a crank end by means of which the bar is turned. It will be evident, of course, that the crank may be substituted by a cross-bar or by a square end, upon which a key may be fitted. There are several ways in which this screw-threaded bar may be turned, which will suggest themselves to the mind of any good mechanic.

When I employ the screw-threaded bar to attach a clamp to a window-ledge or to the cornice of a building, I provide its screw-threaded end with a flat head, (see Figs. 1 and 6,) to avoid injury to the cornice or sill.

In Fig. 1, I show cross-bars G G, each end of each bar G being provided with a clamp to grasp the upright, and upon which cross-bars and the working-boards rest. Part of the scaffold may be erected in this way and part in the manner shown in Fig. 7, Sheet 3. Where the cross-bars G G are employed, the ledger-boards K K are not used, as the working-platform, composed of boards H H, is laid directly upon the said cross-bars G G.

The employment of two screw-threaded rods, as shown in Figs. 8 and 9, Sheet 4, permits me to maintain parallelism between the inwardly-pointed clasps of the clamp, whereby

in making a splice or clasping a single upright the timber or timbers are tightly and closely grasped, whatever their size may be.

What I claim as new is—

1. In a building-scaffold, in combination with the uprights A A' A'' A''', the hinged inwardly-pointed clamps F' F' F' F', adapted to clasp around the said uprights, and provided with tightening screw-rods D' D' D' D', whereby they are firmly secured thereto, substantially as described.

2. In a building-scaffold, in combination with the uprights A A' A'' A''', the hinged clamps F' F' F' F', provided with tightening screw-rods D' D' D' D' and ledger-boards K K, to which said clamps are attached, substantially as and for the purposes described.

3. In a building-scaffold, in combination with the uprights A A' A'' A''', the hinged clamps F' F' F' F', provided with tightening screw-rods D' D' D' D', ledger-boards K K, attached to said clamps, and detachable bridging-clamps J J, resting upon said ledger-boards, and adapted to receive the working-platform H H, substantially as described.

4. In a building-scaffold, in combination with the uprights A A' A'' A''', the hinged inwardly-pointed clamps F' F' F' F', provided with tightening screw-rods D' D' D' D', and suitable connections, K K, between said clamps to support superincumbent cross-pieces, substantially as described.

5. In a building-scaffold, in combination with the uprights A A' A'' A''', the hinged clamps F' F' F' F', provided with the tightening screw-rods D' D' D' D', connections K K from clamp to clamp, and bridging or cross-pieces J J, provided with downwardly-projecting lugs or lips to clasp the connections between the clamps F' F' F' F', substantially as specified.

6. In a building-scaffold, in combination with the uprights thereof, a hinged clasping-clamp provided with a tightening screw-rod at one end, and terminating at its other end in a hook or bend, and a suitable tightening-screw, whereby the clamp is adapted to be attached to various parts of the building and hold the scaffolding-uprights, substantially as described.

7. In a building-scaffold, in combination with the uprights A A', the inwardly-pointed clamp F', composed of two clasping-bands, which are suitably joined at one end by a metallic connection and at the other end by a tightening screw-threaded rod, D', substantially as described.

THOMAS N. SUBERS.

Witnesses:

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THOMAS J. DUNN.