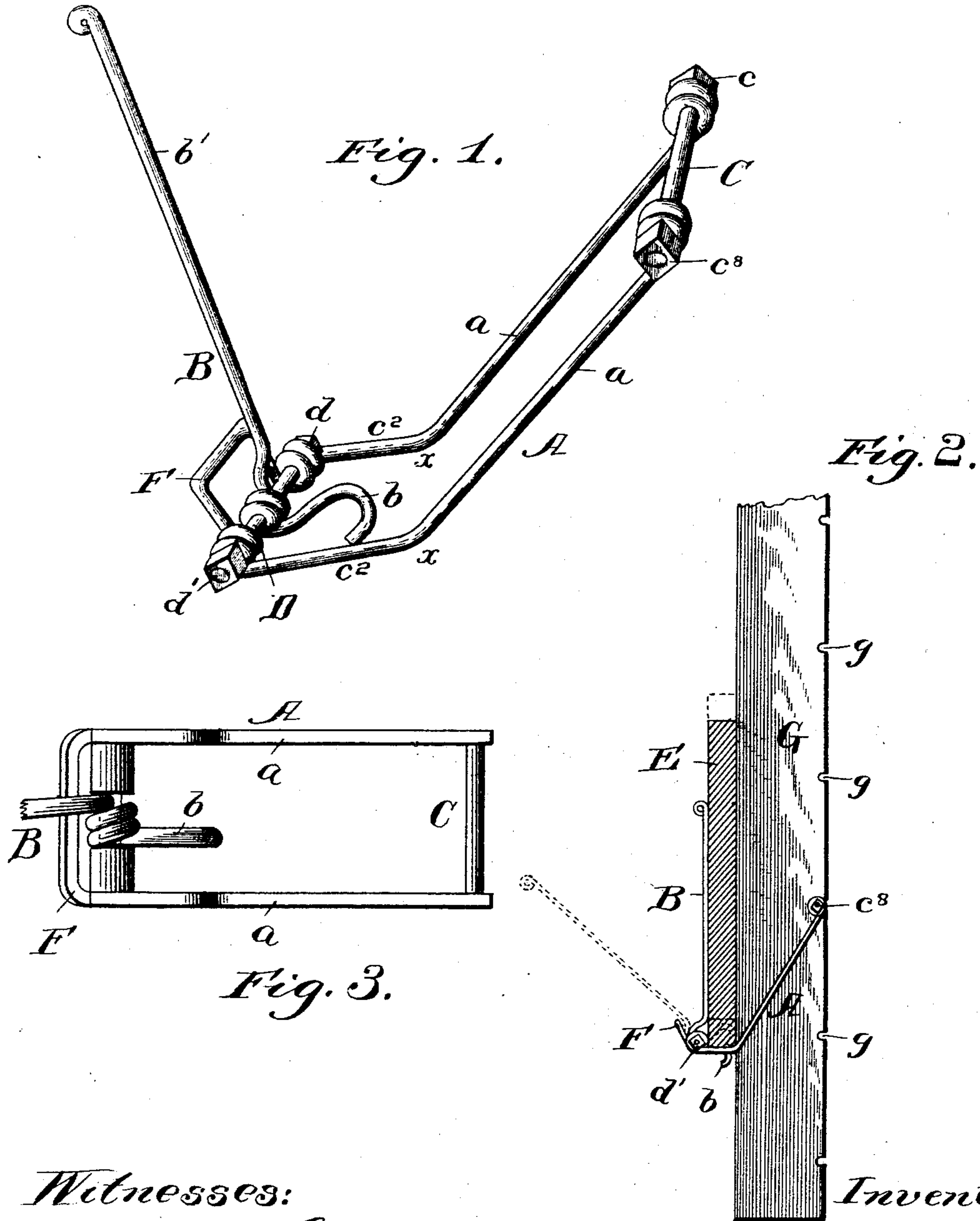


(No Model.)

J. HILLEGASS.
SCAFFOLD CLAMP.

No. 520,051.

Patented May 22, 1894.



Witnesses:

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UNITED STATES PATENT OFFICE.

JACOB HILLEGASS, OF WASHINGTON, DISTRICT OF COLUMBIA.

SCAFFOLD-CLAMP.

SPECIFICATION forming part of Letters Patent No. 520,051, dated May 22, 1894.

Application filed December 22, 1893. Serial No. 494,395. (No model.)

To all whom it may concern:

Be it known that I, JACOB HILLEGASS, a citizen of the United States, residing at Washington, District of Columbia, have invented certain new and useful Improvements in Scaffold-Clamps; and I do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to the letters of reference marked thereon, which form a part of this specification.

My invention relates to an improvement in scaffolding adapted especially for use in the interior of buildings where metallic ceilings are to be constructed, or plastering or other ceiling work is to be done.

The objects of the invention are to provide means by which a scaffold may be readily built and removed without waste of time or material, and to insure strength and security to the structure.

The invention consists in a bracket-clamp of the improved construction hereinafter described and illustrated in the accompanying drawings, and also in the combination of said bracket-clamp with an upright provided with a series of slots or openings.

In the drawings, Figure 1 is a perspective view of a bracket-clamp embodying my invention. Fig. 2 is a side elevation of the same applied to an upright, and showing a scaffold stringer in position, and Fig. 3 illustrates a modification.

The bracket consists of a frame or body-portion A, a lever B, and parallel bolts C and D.

The body portion comprises arms *a* the ends of which are coiled around the respective ends of the upper bolt C, which latter is provided with a head *c* at one end, and is threaded at its opposite end to receive a nut *c*³. Each of the arms *a* is bent at the point *x* to provide a horizontal seat *c*² to receive the stringer E as clearly shown in Fig. 2. The loop end of the body portion or frame, is bent around the lower bolt D, and projects outwardly at an angle to the seat *c*² to constitute a stop F to limit the outward movement of the lever B. This lever B is fulcrumed on the bolt D by bending said lever around the bolt. The inwardly projecting short arm *b* of

said lever is preferably hooked at its inner end, while the long arm *b'* extends outwardly as shown. The bolt D is provided with a head *d*, and a nut *d'*.

The device as thus constructed is adapted for use as follows: The clamp is applied from the top of the upright G, the latter extending between the arms of the clamp as seen in Fig. 2. The upright is formed with a series of edge slots or openings *g* into one of which the upper bolt C is inserted. One end of the stringer E is then placed upon the short end of the lever B and the weight of the stringer depresses said short end *b* of the lever, and throws the long end *b'* upwardly in contact with the outer side of the stringer E as shown in Fig. 2.

It will of course be understood that ordinarily four uprights G, four clamps, and two stringers E are required for a complete scaffold, each of the four ends of the stringers being secured in the manner described, but the above description of a single fastening will suffice to convey an understanding of my improvement.

It will be obvious that by the use of my bracket-clamp I entirely avoid the use of nails in scaffold building, and the consequent loss of time and waste of lumber caused by the splitting of the ends of the stringers in taking the scaffolding apart.

The series of holes or slots in the uprights permits the adjustment or regulation of the height of the scaffold as will be clearly understood.

The construction and relative arrangement of the clamp and upright avoid a direct vertical strain on any of the parts, the strain being diagonal or across the width of the upright, and therefore evenly distributed. It is apparent that pressure or weight on the stringer E, and the short arm *b* of the lever will tend to firmly clamp the long end of the lever against the outer side of the stringer. To remove the scaffold it is only necessary to pull the long end of the lever outwardly, thus raising the short end *b* and allowing the stringer to be withdrawn. The stop F limits the outward movement of the lever.

While I prefer the coiled wire device above described, it will be apparent that the construction of my clamp may be modified with-

out departing from the spirit and scope of my invention. For example in lieu of the metal wire frame I may employ a cast or wrought metal frame having the end bars integral with the sides, and fulcrum the lever on the lower cross-bar as shown in the modification in Fig. 3.

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

1. A bracket-clamp consisting of the combination with a frame comprising end bars and bent sides, substantially as described, of a lever fulcrumed on the lower end bar, the short arm of said lever projecting inwardly between the sides of the frame, as set forth.

2. The combination with an upright provided with one or more openings, of a bracket-clamp embracing said upright, and con-

sisting of an upper cross bar, parallel sides each having a horizontal seat, a lower cross bar, and a lever fulcrumed on the lower cross bar, substantially as described.

3. The combination with the parallel bolts, of a frame the ends of which are coiled around one of said bolts, while the loop portion is coiled around the other bolt and provided with a projecting stop, and a lever coiled around the lower bolt of the device between the arms of the frame, substantially as described.

In testimony whereof I affix my signature in presence of two witnesses.

JACOB HILLENGASS.

Witnesses:

F. A. NORTHROP,

F. O. MCCLEARY.