T. H. KINGSTON.

BUILDER'S LEDGER CLAMP.

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915,187.

Patented Mar. 16, 1909.

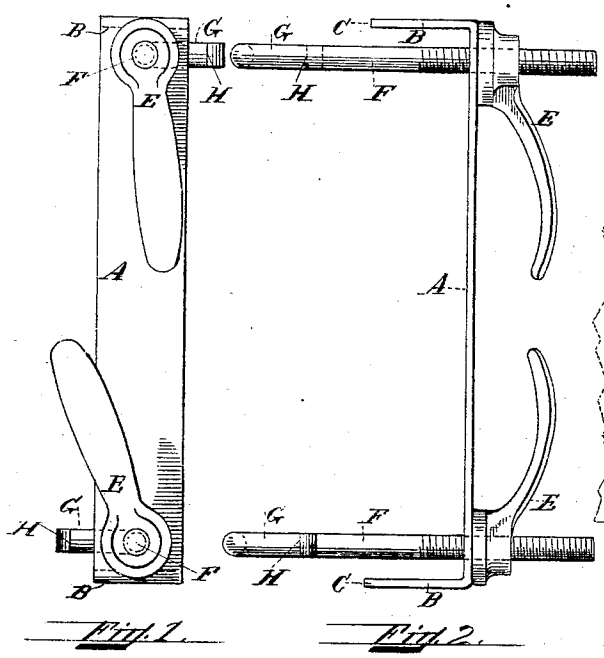


Fig. 1.

Fig. 2.

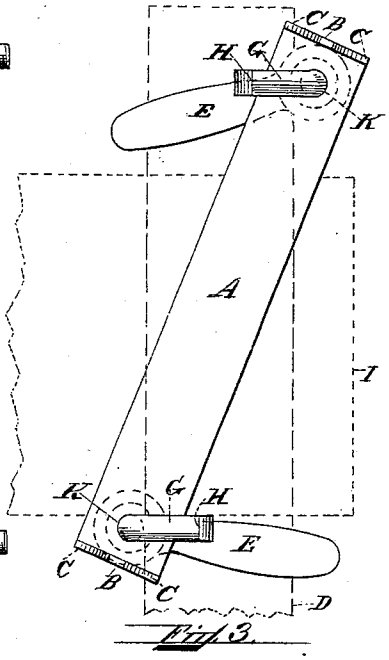


Fig. 3.

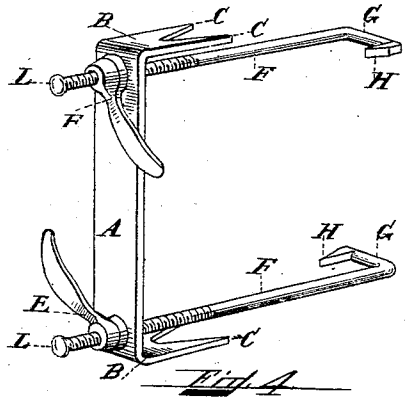


Fig. 4

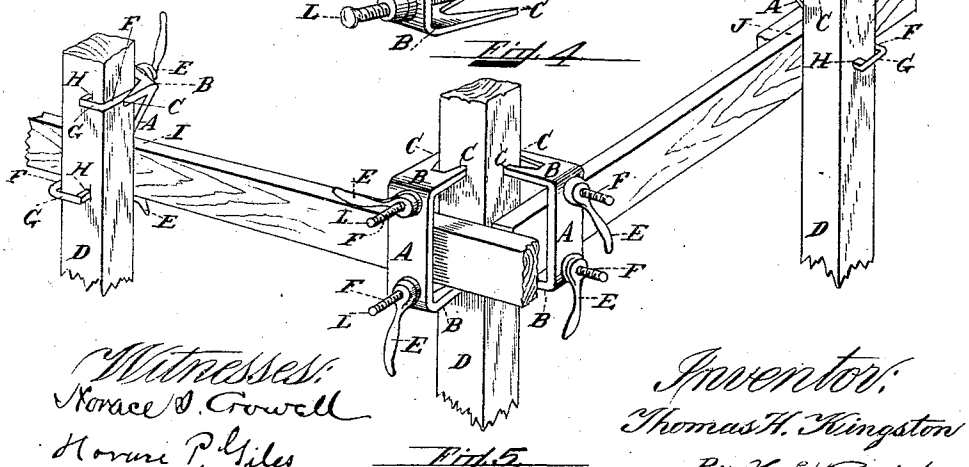


Fig. 5

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UNITED STATES PATENT OFFICE.

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BUILDER'S LEDGER-CLAMP.

No. 915,187. Specification of Letters Patent. Patented March 16, 1909.

Application filed February 17, 1908. Serial No. 416,393.

To all whom it may concern:

Be it known that I, THOMAS HAVELOCK KINGSTON, a citizen of the United States, and a resident of Somerville, in the county of Middlesex and State of Massachusetts, have invented certain new and useful Improvements in Builders' Ledger-Clamps, of which the following is a specification.

My invention relates to improvements in staging supports used in the construction of buildings and for similar purposes, and which I designate a builder's ledger clamp, and the object of my improvement is to provide a metal clamp of light weight, durability and great strength, quickly and easily attached to and detached from the studding or other supports, and capable of securing the ledger boards firmly in position to sustain safely the weight of the scaffolding and workmen thereupon.

I attain said object through the construction illustrated in the annexed drawing forming a part of this specification, in which:

Figure 1 is a front elevation of my improved ledger support or clamp. Fig. 2, designates a side elevation of the same. Fig. 3, exhibits the clamp positioned upon a vertical stud, and securing a horizontal ledger board, each of the latter in dotted lines. Fig. 4, is a perspective view of the ledger clamp organized for its work. Fig. 5, denotes a group of my improved devices also in perspective illustrating the several positions assumed to confine the ledger boards against the studding.

Corresponding letters of reference denote similar features in the drawing referring to which:

A indicates the body of the clamp or metal plate and B B the reflexed ends thereof, each of which are bifurcated to form the terminal multiple spurs C C (Fig. 4), one of which at each end enter, and are sufficient with their coacting bolts presently described to confine said clamp in any position against the studding or uprights D. The initial entering of these points or spurs, may be driven if preferred after positioning, and subsequently forced into the studs D by the handle nuts E E which are turned down upon the external screw-threaded hook bolts F F as shown, the reflexed ends or hooks G G of said bolts terminate in a spur or cutting edge as at H H, which, in the assembled position (Fig. 5), enter the surface of the stud or joist D opposite the side receiving the spurs C C and in this position embrace and securely confine the ledger board or boards to said stud as at I and J respectively, the lower edge of said ledgers resting upon the body of the bolt as shown in Fig. 3, in which situation they are arranged to receive the planks—not illustrated—forming the support for the staging.

In the assemblage of these clamps the screw threaded ends of the bolts F F pass through the body A at, or near the ends thereof which are perforated as at K K to receive them, the spurs C lying opposed to the points G. The handle nuts E E, internally threaded, with their bolts thus forming a twisting pair, are then turned down upon the body A, and the heads of said bolts slightly upset as at L (Fig. 4) if desired, thus obviating the displacement or loss of said nuts; preferably, this procedure would be carried out when the devices are ready for use and after shipment, so as to offer no obstacle in the matter of packing said devices in a compact manner.

In the adjustment of my improved clamps to practically perform their office, one clamp, if confining one or more ledger boards against a stud (Fig. 3) should be positioned diagonal with the stud in a manner that the spurs H H arranged in right and left direction (Fig. 4) overreach the stud from opposite sides, the ledgers interposing the clamp body A and the surface of the stud D, the under edge of said ledgers preferably resting upon the lower bolt F to impart greater stability. In the arrangement of the single ledgers (Fig. 5) abutting a corner studding, the clamps are vertically placed, parallel with the adjacent outward surfaces of the stud, and in a position allowing the bolts to lie in juxtaposition to the inward faces of said stud which receive two alined spurs of each clamp substantially as illustrated, the non-penetrating spurs resting against the inner sides of said stud contiguous to the bolts; the clamps are then securely confined against the uprights by the handle nuts as previously set forth.

Obviously the clamp body A would be operative and effective with a spur or spurs at its upper end, with the reflexed lower end resting against the stud, but I prefer for greater security the device substantially as exhibited.

The efficiency of my improved invention to sustain great weight, its durability, compactness, lightness, and the facility of attachment make it an important factor in the builders trade; and while there may be other

modifications structurally departing from the manner illustrated, I do not limit myself to the strict interpretation herein disclosed but may vary the same without departing from the spirit of my invention.

I claim:

1. A builder's ledger clamp comprising a reflexed body having means for penetrating the studding, a handle nut to secure and maintain such penetration, a sustaining bolt having means at one end to embrace said studding and provided at the opposite end with a head obviating displacement after assemblage of the several devices.

2. A clamp for use in stage construction embodying a hooked bolt having a cutting terminal at one end and a screw thread at the opposite end, a handle nut internally screw threaded coöperating with the external screw to form a twisting pair, a plate pierced to receive said bolt and having a reflexed end terminating in a spur arranged to enter a studding and means integral with the bolt to permanently confine said twisting pair and plate thereon for the purpose of forming a scaffolding.

3. The herein described ledger clamp, comprising the following combination, a metal body having the ends thereof reflexed and bifurcated to provide duplicate penetrating spurs, a pair of bolts having an external screw thread at one end, and provided with a hook at the opposite end terminating in a cutting edge, a pair of internal threaded handle nuts coacting with said bolts and means in said body for the reception of the hook bolts when the devices are organized for use.

4. A ledger clamp for builders' use comprising the following instrumentalities, a reflexed and multiple spurred body, a pair of hooked members penetrating said body provided with a screw thread and having duplex cutting terminals, and means coacting with said terminals to form a twisting pair arranged and adapted to draw said spurs and cutting surfaces together so as to confine an intervening body for the purposes set forth.

In testimony whereof I have affixed my signature, in presence of two witnesses.

THOMAS HAVELOCK KINGSTON.

Witnesses:

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A. B. BARBER.