W. J. DONLEY.

Joiners' Clamps.

No. 167,314. Patented Aug. 31, 1875.

Fig. 1.

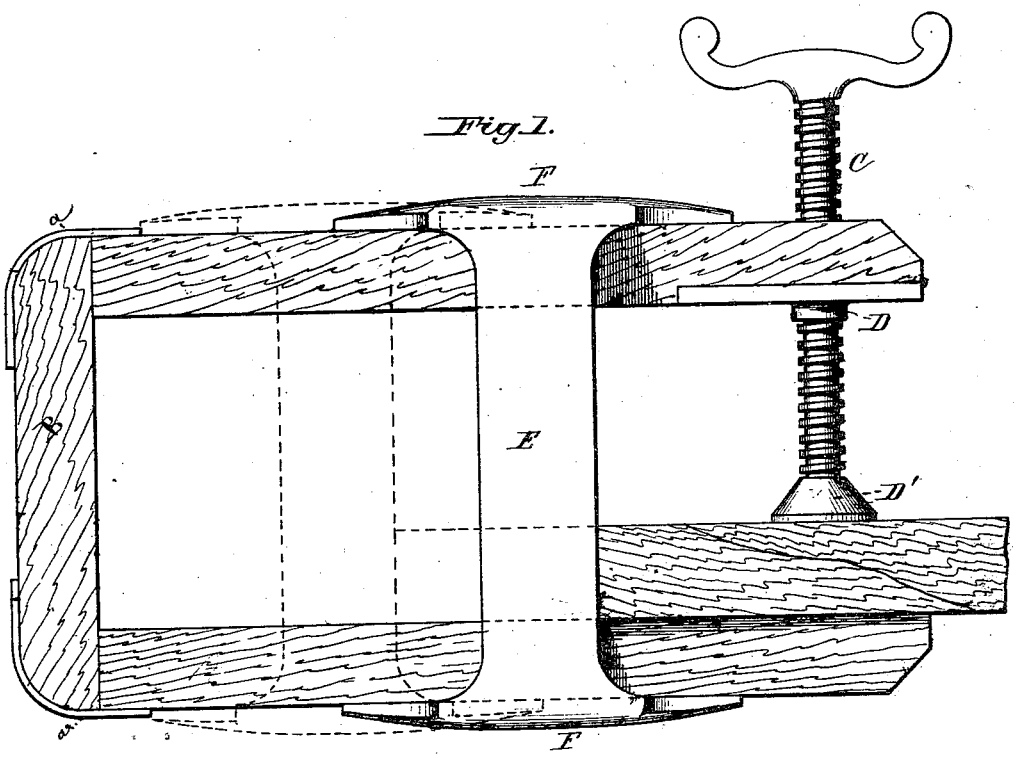
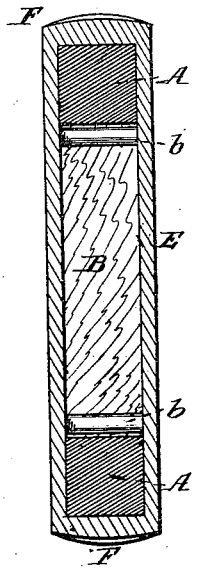


Fig. 2.



Witnesses:

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By his attorney,

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UNITED STATES PATENT OFFICE.

WILLIAM J. DONLEY, OF CAMDEN, NEW JERSEY.

IMPROVEMENT IN JOINERS' CLAMPS.

Specification forming part of Letters Patent No. **167,314**, dated August 31, 1875; application filed July 7, 1875.

To all whom it may concern:

Be it known that I, WILLIAM J. DONLEY, of Camden, in the county of Camden and State of New Jersey, have invented certain new and useful Improvements in Joiners' Clamps, of which the following is a specification:

This invention has reference to that class of clamps which are used by joiners, carpenters, carriage-makers, and wood-workers in general, for the purpose of clamping or compressing pieces of wood while being joined, or for any other purpose.

The invention consists in a clamp for the purpose specified, comprising a pair of longitudinal wooden arms or jaws connected at one end by a bar or arm, and carrying near their free ends a clamping-screw, which operates or turns in a nut secured to one of the arms of the clamp, a metallic clamp or casting being fitted on both arms in rear of the clamping-screw, for the purpose of bearing against the ends or edges of the articles of wood to be joined, said jaw or casting being movable back and forth, or to and from the screw, so as to vary the space for the reception of the work between the two jaws.

In the accompanying drawing, Figure 1 illustrates a side view of a joiner's clamp made according to my invention, the sliding metallic clamp being shown in two different positions; and Fig. 2 is a vertical section thereof.

In the drawing, letter A denotes the two longitudinal wooden bars or arms, which, in connection with the connecting cross arm or bar B, constitute the frame or main portion of the clamp. The joints of the three respective bars are re-enforced or strengthened by metallic corner-caps or angle-plates *a*. A handled clamping-screw, C, passes through one of the clamping-arms A, and a fixed nut, D, secured to the inner side of the same. The lower end of the screw carries a movable head, D′, between which and the bottom clamp-bar the work is secured or compressed. A movable jaw or metallic casting, E, composed of two side plates and end connecting-plates F, is made to slide on the wooden arms of the clamp in rear of the clamping-screw. The movable jaw is designed to bear against the ends or sides of the articles of wood, &c., confined in the clamp, in order to prevent the endwise motion of the same, the jaw itself being prevented from moving by the frictional pressure or contact of the clamp-bars, when the clamping-screw is borne down upon the articles held by the clamp. The casting or movable jaw is held to its place while sliding by means of ribs or pins *b*, applied to the same, to bear or rest against the inner sides of the bars A. The principal object of the sliding jaw is to bear against and hold the articles confined in the clamp, and by making it movable the space or aperture in rear of the clamping-screw can be varied—that is, it can be enlarged or diminished, so as to enable the clamp to be used for holding various-sized articles. The position of the movable jaw, when drawn back to the rear end of the clamp preparatory to the insertion of the work into the same, is illustrated by the dotted lines in the drawings.

It will be evident that, instead of constructing the frame A of wood, it may be made of metal, either cast in a single piece or made of separate pieces suitably fastened together.

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

The joiner's or carriage-maker's clamp herein described, comprising the clamp-arms A B, sliding metallic jaw or casting E, and the clamping-screw C, all constructed and combined substantially as herein set forth.

In testimony that I claim the foregoing I have hereunto set my hand in the presence of the subscribing witnesses.

WM. J. DONLEY.

Witnesses:

CHAS. S. CAFFREY,

JAMES M. CASSADY.