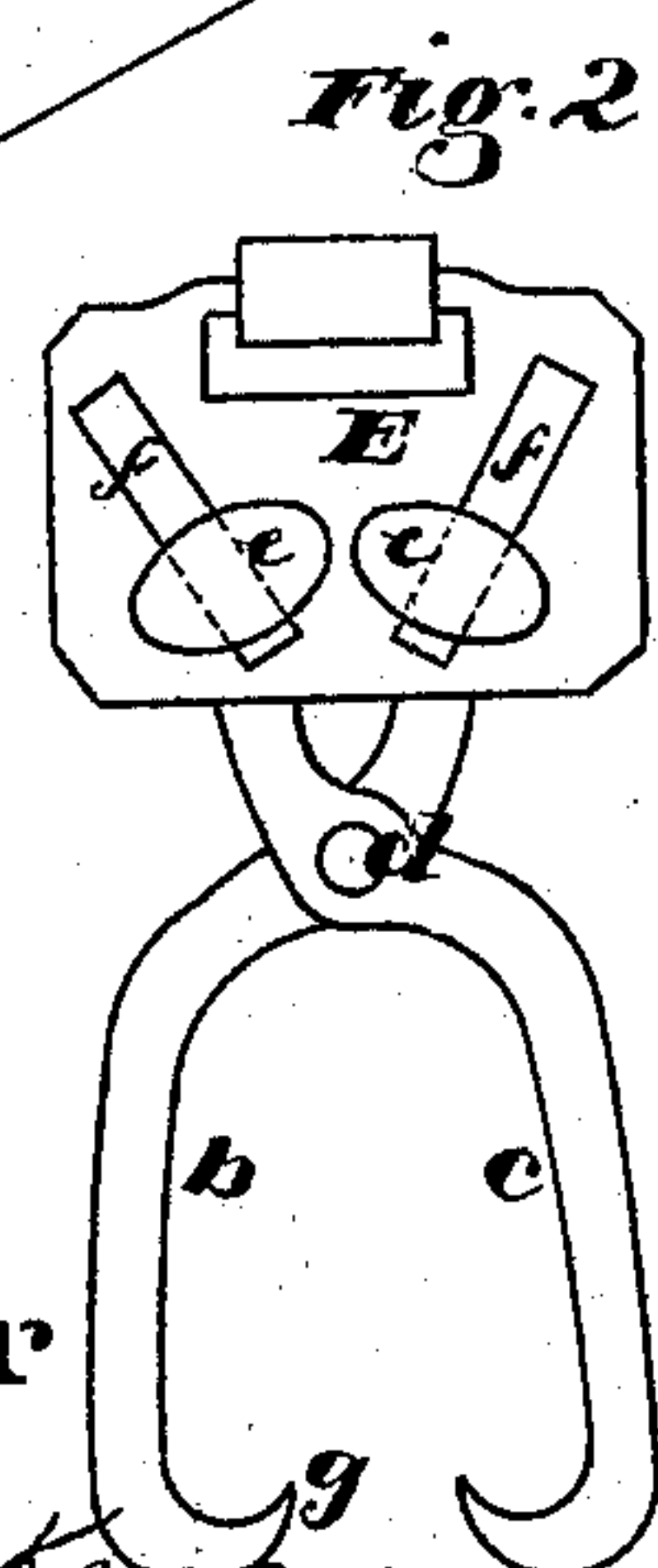
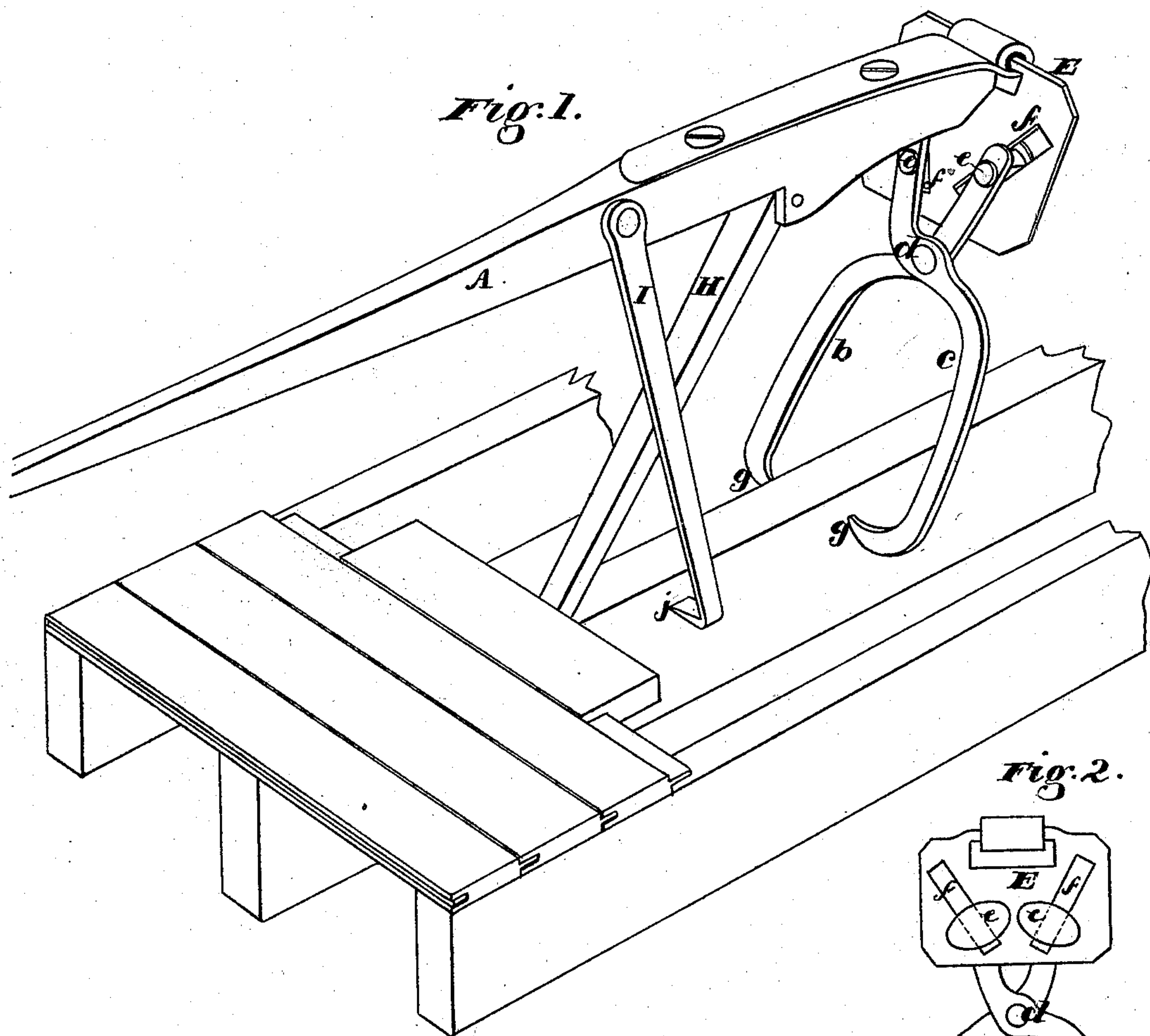


**E. HICKMAN.**  
**Floor-Clamps.**

No. 165,446.

Patented July 13, 1875.



**Witnesses**  
*Geo. H. Strong.*  
*Geo. L. Boone*

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# UNITED STATES PATENT OFFICE.

ELIJAH HICKMAN, OF RED BLUFF, CALIFORNIA.

## IMPROVEMENT IN FLOOR-CLAMPS.

Specification forming part of Letters Patent No. **165,446**, dated July 13, 1875; application filed April 15, 1875.

*To all whom it may concern:*

Be it known that I, ELIJAH HICKMAN, of Red Bluff, Tehama county, State of California, have invented an Improved Floor-Clamp; and I do hereby declare the following description and accompanying drawings are sufficient to enable any person skilled in the art or science to which it most nearly appertains to make and use my said invention or improvement without further invention or experiment.

My invention relates to an improved device for pressing floor-boards together, so as to make tight joints, and then holding the boards firmly in place while they are being nailed to the joists.

In the accompanying drawing, A represents the handle or lever, which may be of any desired length. To one end of this lever or handle I secure the gripping device which clamps the sides of the joists, in order to get a hold from which to apply the leverage. This gripping device consists of two strong bars of metal, *b c*, which cross each other like a pair of shears, and are riveted together at the point *d*, as shown. The upper portion or handles of these grippers are secured to a plate, E, by means of rivets *e*, which pass through inclined slots *f* in the plate. The slots *f* approach each other toward their lower ends, as shown, so that when the rivets move downward in them the upper and lower portions of the jaws are closed together, and by moving them upward they are separated from each other, and the gripping-jaws are correspondingly opened. The points of the gripping-jaws are bent inward toward each other, so that they form hooks *g*, which will grasp the opposite side of the joist when they are closed upon it. The plate E is secured loosely to one end of the lever, so that the jaws can be operated in any position and at any angle desired. H is the brace-bar which serves to press the boards together. This bar has one end pivoted to the under side of the lever or handle A near the gripping-jaws, so that when the jaws have been closed upon

the joist the free end of the bar H can be placed against the edge of the board, when, by pressing down upon the outer ends of the lever, the boards will be pressed together. A retaining-bar, I, has one end secured by a rivet to one side of the handle or lever A, between the brace-bar H and outer end of the lever, while its opposite end is formed into a hook, *j*. After the boards are set up closely, as above described, they are held in position by driving the hook or pointed end of the retainer into the side of the joist, so that it will prevent the lever from moving upward or away from the joist, thus holding it in place. When this bar is not in use it can be turned up against the side of the handle and the hook sprung into the socket in the bar. This retaining-hook will also be valuable in doing overhead work, such as matching ceiling-boards, as the clamp can be used to draw the boards together, and the hooked retainer will hold them in place while the nails are being driven.

I thus provide an exceedingly simple and effective flooring-clamp. The converging slots serve to tighten the gripe of the jaws on the joist in proportion to the force exerted on the lever.

In case it is desirable not to mar the sides of the joists, a shoe with a roughened face can be secured to the hooks *g*, so that the hooks will not come in contact with the wood.

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

The handle or lever A, having the loosely-attached plate E, provided with the converging slots *f*, in combination with the shear-like gripping-jaws *b c*, headed slides or rivets *e*, brace-bar H, and retaining-bar I, constructed to operate substantially as and for the purpose above described.

ELIJAH HICKMAN.

Witnesses:

GEO. H. STRONG,  
JNO. L. BOONE.