

W. W. INGRUM.
Joiners' Floor Clamps.

No. 146,828.

Patented Jan. 27, 1874.

Fig. 1.

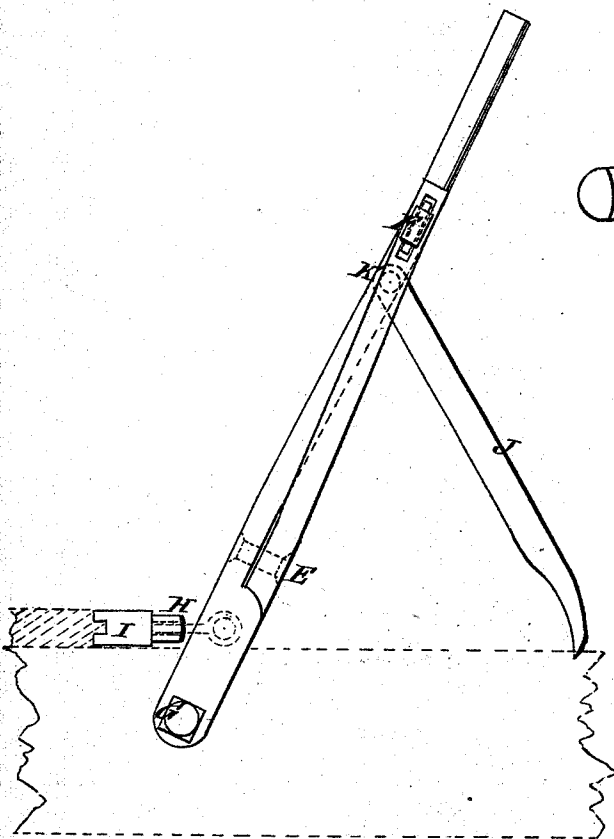
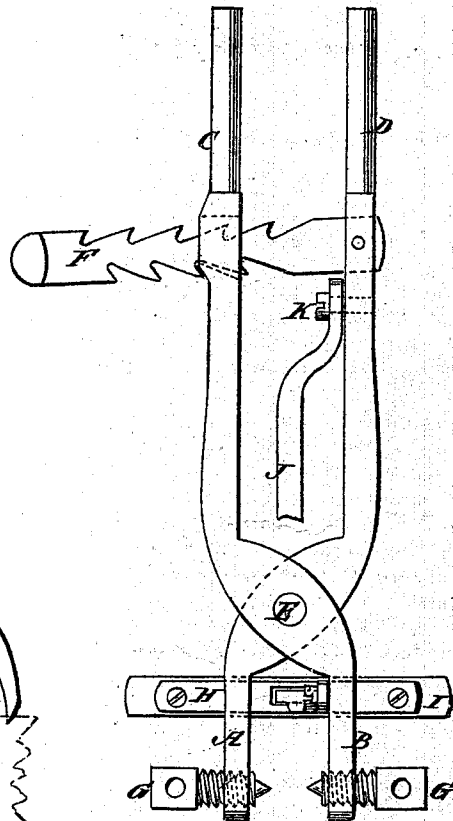


Fig. 2.



WITNESSES:

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WILLIAM W. INGRUM, OF BATESVILLE, ARKANSAS.

IMPROVEMENT IN JOINERS' FLOOR-CLAMPS.

Specification forming part of Letters Patent No. **146,828**, dated January 27, 1874; application filed November 22, 1873.

To all whom it may concern:

Be it known that I, WILLIAM W. INGRUM, of Batesville, in the county of Independence and State of Arkansas, have invented a new and useful Improvement in Joiner's Floor-Clamp, of which the following is a specification:

The invention will first be fully described, and then pointed out in the claim.

In the accompanying drawing, Figure 1 shows the clamp applied as when laying a floor. Fig. 2 is a side view, showing the construction of the machine.

Similar letters of reference indicate corresponding parts.

A and B represent the jaws of the clamp; C and D, the handles or shanks thereof. These parts are put together with a pivot, E, on which they open and close, the same as a pair of tongs. F is a double ratchet-bar, which is pivoted at one end to the shank D in a mortise. The ratchet part of the bar passes through a mortise in the other shank, and the teeth catch on the ends of the mortise, as seen in Fig. 2, to keep the jaws closed when they are attached to the timber of the floor or ceiling. The ratchet is made double, so that the clamp may be used overhead. The ratchet drops by its own gravity and engages automatically. G G are screw-points through the ends of the jaw. These screws are turned by means of a small pin or lever, and the points enter the sides of the timber and prevent the

jaws from slipping. H is a metallic bar, which is loosely pivoted to the jaw B. It is attached to a piece of wood, I, which is placed against the piece of flooring or ceiling which is to be forced up to its place. This bar is rounded on its inner side, and will roll or rock on the jaw and maintain a position parallel with the floor, as seen in Fig. 1. J is a drag-bar, which is pivoted to one of the shanks, as seen at K. The lower end drags on the timber, and it acts as a pawl to hold the clamp in position. As seen in Fig. 1, the clamp (as a whole) is a lever, the points G G being the fulcrums, the purchase of which lever is the distance between the fulcrums and the center of the metallic bar H.

This machine is applicable to many purposes, but is more particularly designed to facilitate the laying of floors, ceiling overhead, or on walls, and in similar places.

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

The combination of pieces A D and B C, pivoted at E, the pawl J, the pivot-screws G G, and the bar H, having the grooved end pieces I, with a ratchet, F, pivoted to the arm D, and passing through a mortise in lever C, as and for the purpose specified.

WILLIAM W. INGRUM.

Witnesses:

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