

W. S. SPINK & W. MASON.
FLOOR CLAMPS.

No. 178,389.

Patented June 6, 1876.

Fig. 1.

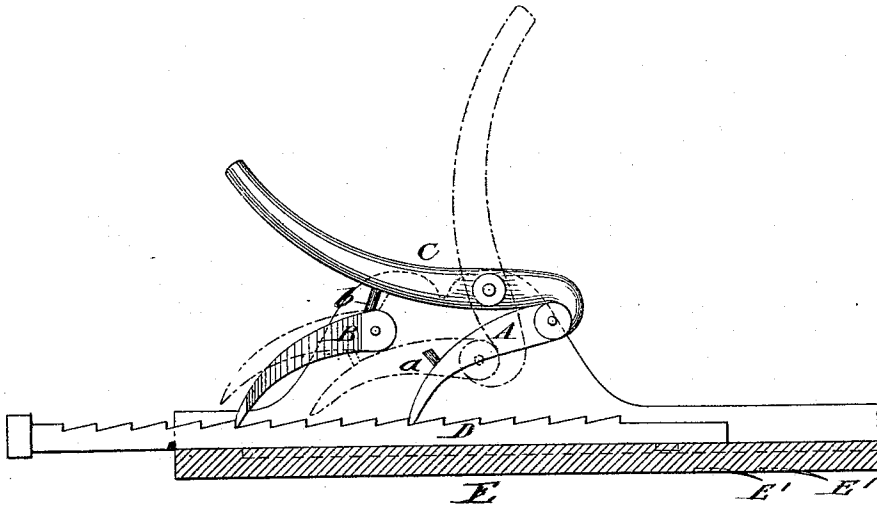
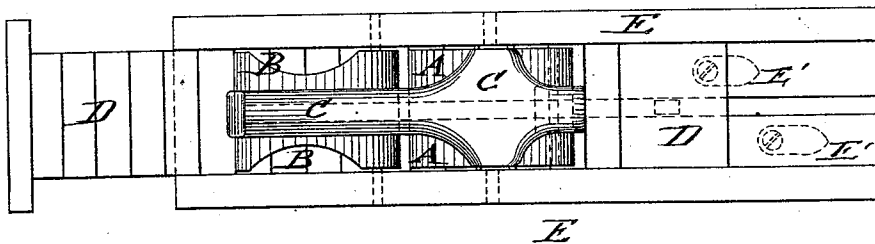


Fig. 2.



WITNESSES:

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WILLIAM S. SPINK AND WILBER MASON, OF PROVIDENCE, RHODE ISLAND.

IMPROVEMENT IN FLOOR-CLAMPS.

Specification forming part of Letters Patent No. **178,389**, dated June 6, 1876; application filed March 25, 1876.

To all whom it may concern:

Be it known that we, WILLIAM S. SPINK and WILBER MASON, of Providence, in the county of Providence and State of Rhode-Island, have invented an Improvement in Floor-Clamps, of which the following is a specification:

In the accompanying drawing, Figure 1 represents a sectional side elevation of our improved floor-clamp, and Fig. 2 a top view of the same.

Similar letters of reference indicate corresponding parts.

The object of our invention is to furnish an improved floor-clamp of considerable power and reach; and it consists of a grooved base-piece, with floor-entering knives, a ratchet slide-piece, and an operating-lever, together with moving and locking pawls. The operating-pawl has a top pin that releases the locking-pawl when the slide-piece is to be carried back.

In the drawing, E represents the base or guide piece, that has a longitudinal groove and side pieces for guiding the slide-piece D.

The base-piece E is provided at the under side and rear part with downward-curved knife-blades E', that enter wedge-like into the wood to secure a firm support for the action of the clamp.

The knives E' are set into recesses of the base-piece and attached by screws, to be readily detached and replaced in case of breaking.

The slide-piece D runs by a bottom pin in the groove, and acts by its broad head on the plank or board, being moved forward by a pawl, A, that enters the ratchet-shaped top part of the slide-piece.

The pawl A is pivoted to the shorter end of the operating-handle lever C, which is fulcrumed to raised side bearings of the base-piece E. The raising of the handle pushes the slide-piece forward as far as required; the more the handle is raised the more is the slide-piece pushed out.

A second pawl, B, is pivoted to the raised side bearings of the base-piece in front of the pushing-pawl A, and serves to lock the slide during the backward motion of the pushing-pawl, for accomplishing the next forward motion and a longer reach.

The pushing-pawl A has a projecting pin, *a*, at the upper part, that is carried below the locking-pawl when the handle-lever is raised, and pushes against the same so as to throw it out of the ratchet and release the slide-piece for being moved back again.

The locking-pawl B has also a top pin, *b*, on which the handle-lever is thrown when carried down, so as to secure the relocking of pawl B in the slides preparatory to being moved forward for clamping. Thus, a reliable and powerful clamp of large reach is obtained for joining floor-boarding and other purposes.

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

The combination, with a ratchet, D, sliding in a suitable bed, and a defent, B, pivoted to bed-frame, of the lever C, provided with a pushing-pawl, A, having the pin *a*, as and for the purpose specified.

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Witnesses:

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