

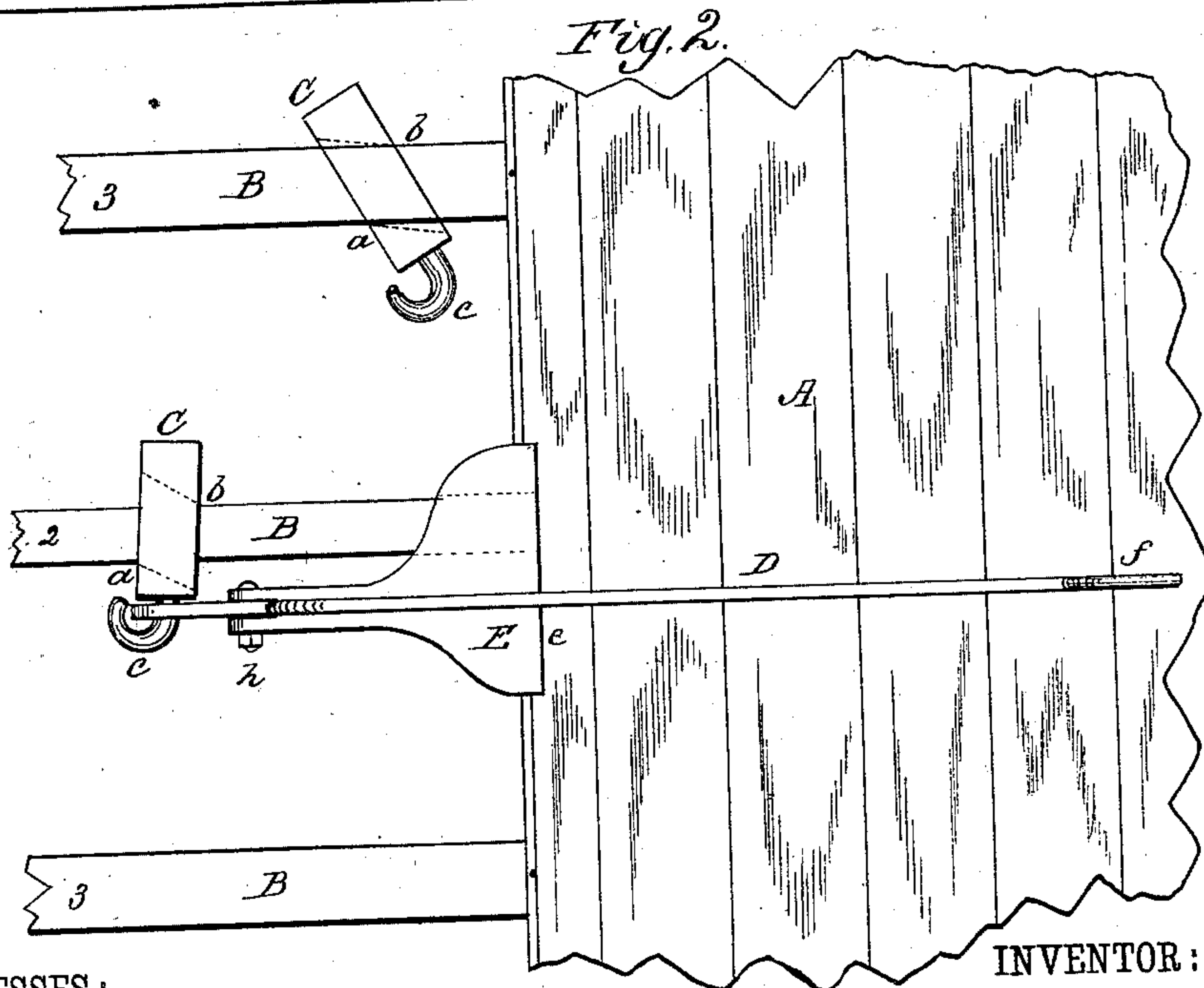
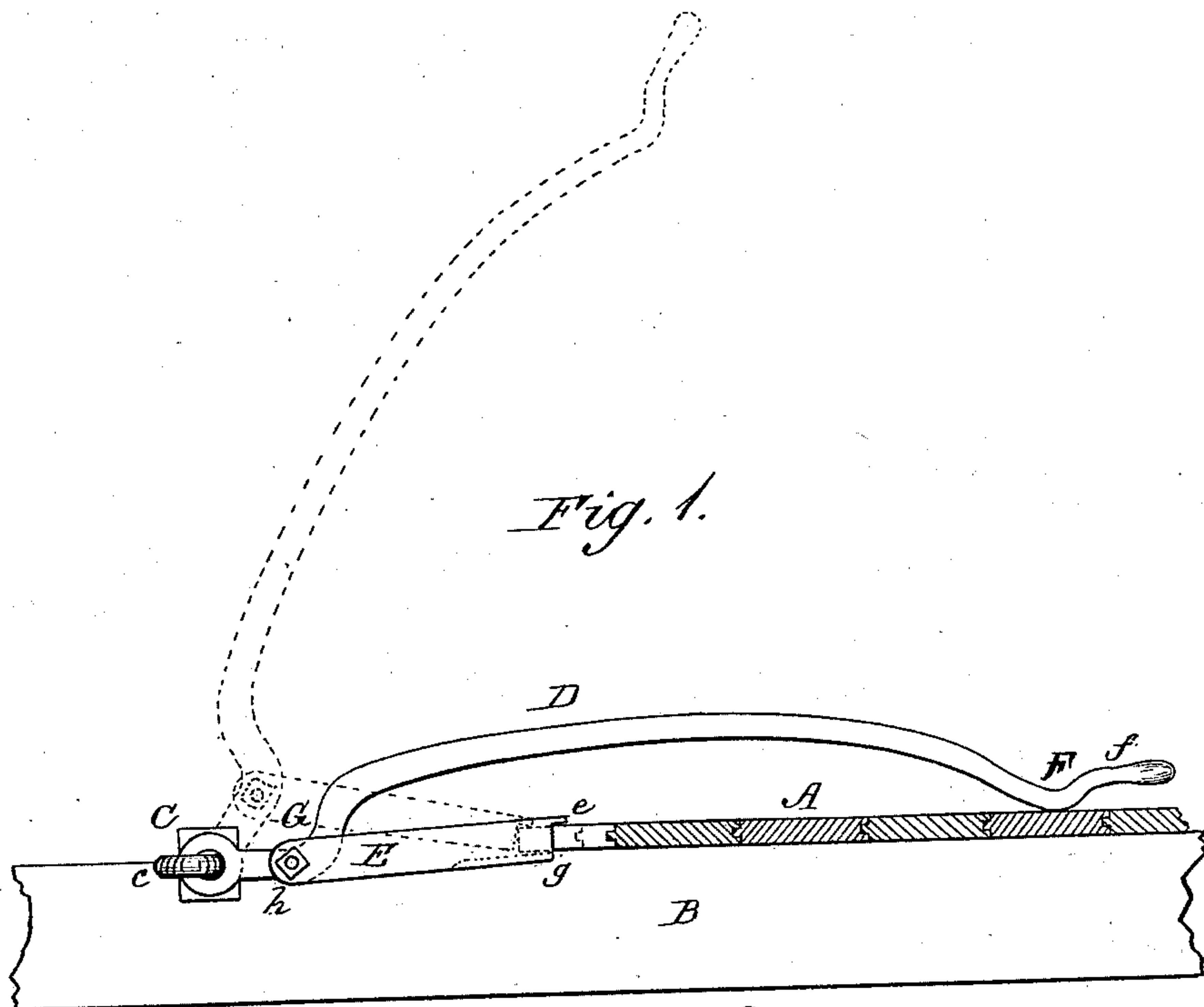
(No Model.)

E. CAYWOOD.

FLOOR CLAMP.

No. 281,968.

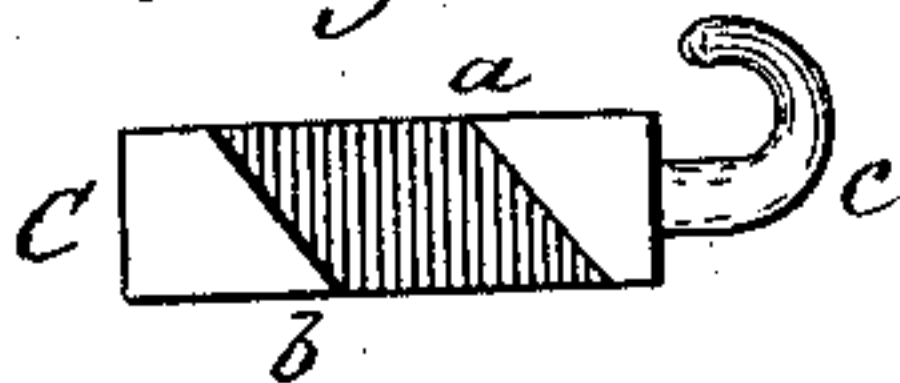
Patented July 24, 1883.



WITNESSES:

W. W. Hollingsworth
W. H. Stevens.

Fig. 3.



INVENTOR:

Ernest Caywood
BY *Munn & Co.*
ATTORNEYS.

UNITED STATES PATENT OFFICE.

ERNEST CAYWOOD, OF VINING, KANSAS.

FLOOR-CLAMP.

SPECIFICATION forming part of Letters Patent No. 281,968, dated July 24, 1883.

Application filed April 26, 1883. (No model.)

To all whom it may concern:

Be it known that I, ERNEST CAYWOOD, a citizen of the United States, residing at Vining, in the county of Clay and State of Kansas, have invented a new and Improved Floor-Clamp, of which the following is a specification.

My invention relates to that class of clamps used for crowding boards together edgewise in order to form tight joints between them in the process of laying floors; and it has for its object to produce a floor-clamp which may be quickly attached to the joists on which the floor is being laid, and worked by one hand of the workman to press the boards together, and to so hold them of its own accord, leaving both hands of the workman free. To this end it consists in the construction and combination of parts hereinafter described and claimed, reference being had to the accompanying drawings, in which—

Figure 1 is a transverse vertical section of a piece of flooring, showing my clamp in side elevation. Fig. 2 is a plan view of the same, and Fig. 3 is an inverted plan view of the clamp-holder.

A represents the floor-boards, and B the joists upon which the floor is to be laid.

C is the clamp-holder, having rigidly fixed jaws *a b*, to engage the vertical sides of the joist B at diagonal points by a vertically-twisting strain. The distance between the jaws *a b* is such as to engage a two-inch joist (marked 2 in the drawings) when the holder C crosses the joist nearly at right angles, and to engage a three-inch joist (marked 3) when the holder is in a diagonal position.

c is a stud upon the end of holder C, upon which the lever D is loosely fulcrumed.

E is the presser, pivoted at its rear end to lever D, and gained across its forward end, to rest the lip *e* of the gain on top of the floor-board, or of an intermediate board used to distribute the pressure, while its shoulder *g* presses the edge thereof. In use the shoulder of the presser is placed against the edge of the board to be laid, or against the intermediate board, and while the handle is held in the position shown in dotted lines by the workman's left hand the holder C will rest on the joist B, with the jaws *a b* loosely touching the sides thereof. Now, a downward pressure of the

lever will first engage the jaws firmly with the joist, and will then force the presser E against the board, and when the joint *h* of the presser and lever approaches the line of the forward end of the presser and the lever-fulcrum *c* the force applied to the lever is almost infinitely multiplied in its application to the edge of the board. By the use of this clamp the crookedest and most refractory boards may be pressed to form tight joints in the floor. The offset G in the lever at its joint with the presser permits that joint to pass below the line of centers when the lever touches the floor, thus holding the clamp to its duty while the workman leaves the lever to nail down the board. To permit the handle to be grasped when resting on the floor I have provided an offset, F, to rest on the floor, when the handle *f* is sufficiently raised to admit the hand of the workman between it and the floor. The presser is slotted in the under side of its forward end to rest on the joist, as a guide to assist in handling the clamp with one hand.

This clamp may be used for laying wainscoting and ship's siding, as well as flooring. It is adapted for use wherever boards are to be laid on joists or similar beams.

What I claim as my invention, and wish to secure by Letters Patent, is—

1. In a floor-clamp having a presser adapted to crowd against the edge of the floor, the combination, with a lever pivoted to said presser, of a clamp-holder consisting of a block provided with diagonal jaws on one face, and a stud on one end engaging the lever as a fulcrum therefor, as shown and described.

2. The combination, with a floor-clamp holder having diagonal jaws adapted to engage the vertical sides of the joist, and a stud projecting from one of its ends, of a lever fulcrumed on said stud, adapted to swing down upon the floor, and a presser pivoted to the lever at one side of the line of the joist to which the jaws are adapted to hold, as shown and described.

3. The combination, with a floor clamp-holder having jaws and a stud in such relation to each other that the jaws are adapted to engage the sides of a joist of the floor when the center of the stud is below the top of the floor, of a lever fulcrumed on said stud, having one upward offset near the fulcrum and

another upward offset near the handle, and a
presser pivoted to the lever at the lower curve
of the first offset, as shown and described,
whereby the presser-pivot may be brought
5 below the line of the lever-fulcrum and the
point of contact of the presser and floor-edge,
and space will be left for the operator's hand
beneath the handle when the lower curve of
the second offset rests on the floor, for the pur-
pose stated.

ERNEST CAYWOOD.

Witnesses:

J. W. SHAFFER,
HENRY COOPER.