

H. CHILSON.
Flooring-Clamps.

No. 153,422.

Patented July 28, 1874.

Fig 1

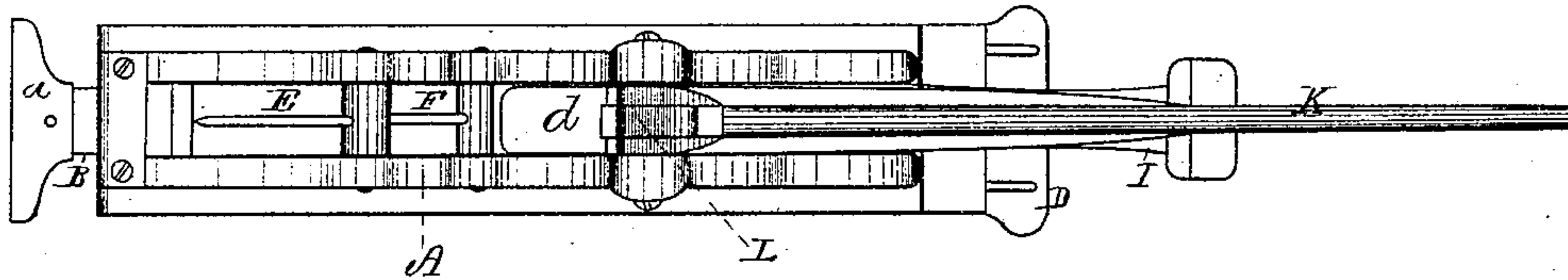


Fig 2.

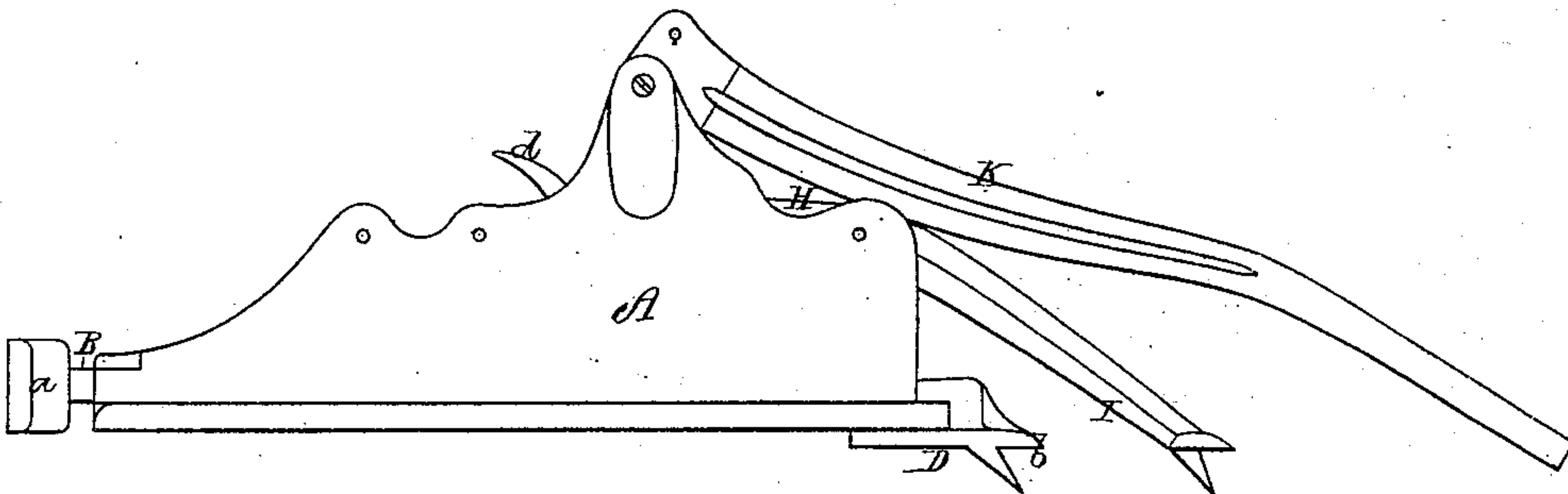
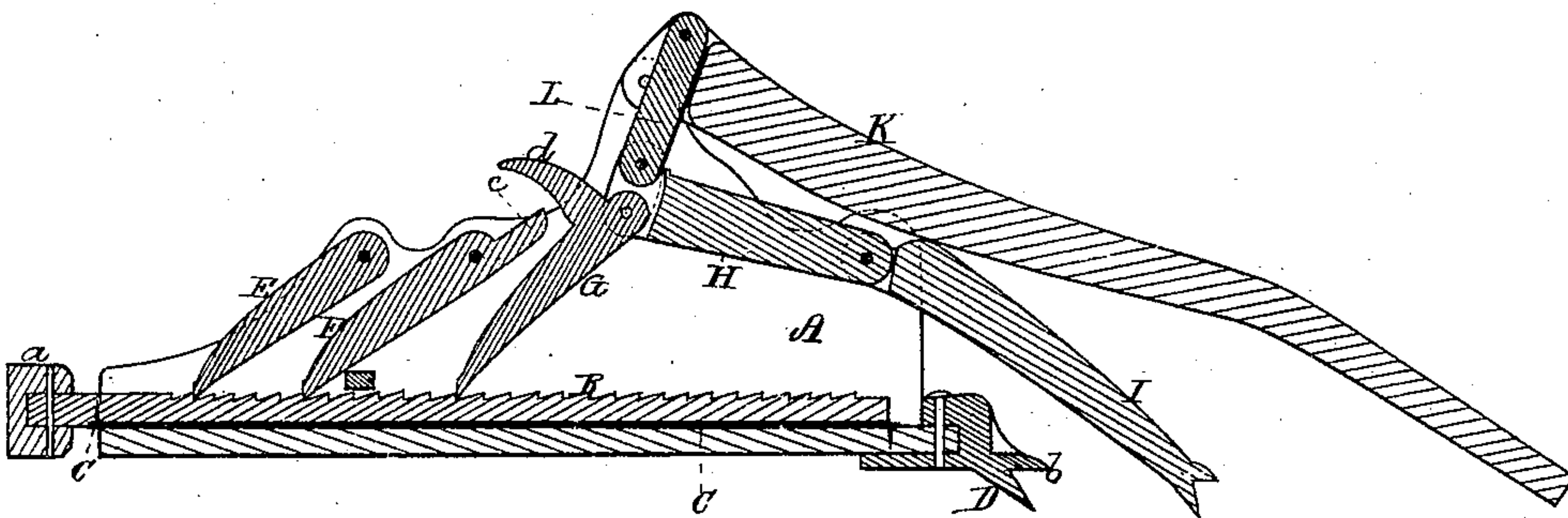


Fig 3.



Witnesses.

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UNITED STATES PATENT OFFICE.

HELM CHILSON, OF WARE, MASSACHUSETTS.

IMPROVEMENT IN FLOORING-CLAMPS.

Specification forming part of Letters Patent No. **153,422**, dated July 28, 1874; application filed June 10, 1874.

To all whom it may concern:

Be it known that I, HELM CHILSON, of Ware, of the county of Hampshire and State of Massachusetts, have invented a new and useful Improvement in Flooring - Clamps; and do hereby declare the same to be fully described in the following specification and represented in the accompanying drawings, of which—

Figure 1 denotes a top view, Fig. 2 a side elevation, and Fig. 3 a longitudinal section, of a flooring-jack embodying my invention.

The machine is for the purpose of "setting up" or pressing firmly together, edge to edge, the upper boards of a floor, preparatory to the operation of nailing such into place.

In the drawings, A denotes the jack-frame, provided with a movable rack, B, which, arranged within the frame in manner shown, terminates at its outer end in a head, *a*. The said rack is furnished with a spring, C, for retracting it within the case. The case, at its heel or rear end, has a chisel-shaped holder, D, arranged with it, and provided with a shoulder, *b*, all being as shown. Over the rack, and within and pivoted to the case, are two retaining-pawls, E F, the rearmost one of which, F, extends underneath the foremost one, E, and is furnished with a trigger, *c*, projected from it, as represented. In rear of the retaining-pawls is an impelling-pawl, G, which, at its lower end, rests in the rack, and at its upper end is hinged to a toggle, H, arranged within the frame A in manner as shown. At or near its rear end the toggle is pivoted to the frame A in connection with a toothed brace, I, extended therefrom, and formed as represented. A trigger, *d*, projects, in manner as shown, from the impelling-pawl. Over the junction of the toggle and the impelling-pawl is a lever, K, which is pivoted to the frame A, and to a pitman, L, which, at its lower part, is pivoted or hinged to the toggle.

By moving the longer arm of the lever backward and forward through an arc of one hundred and eighty degrees, or less, the im-

PELLING-pawl will be alternately retracted and forced forward, so as to advance the rack, the retaining-pawls alternately dropping from the teeth, so as to hold the rack at the extent of its forward movement.

In using the machine or jack, it is to be placed in the first course of floor-boarding, and at right angles with the second course of floor-boards to be set up, the head of the rack being against the adjacent edge of the board. The holder D is next to be driven into the first course of boarding, or to rest against a cleat nailed thereon. This having been done, the brace I should be turned down upon, and set into, the floor, its purpose being to prevent the frame from rising at its front end while the rack may be in the act of being driven forward, or while holding the board after it may have been set up to another. Having thus prepared the jack with respect to the floor and the board to be set up, the lever is to be worked so as to cause the rack to be advanced the necessary distance.

The purpose of the two triggers *c* and *d* is to enable a person, by pressing against them simultaneously, with his finger laid between them, to raise all the pawls out of engagement with the rack, in order that it may be forced or driven backward within the frame, which will be effected by the retractive power of the spring, which may be a belt of india-rubber, or a wire bent in a helix.

I claim as my invention in the said flooring-jack as follows, viz:

1. The holder D, frame A, brace I, toggle H, link L, lever K, impelling-pawl G, one or more retaining-pawls, E F, and the rack B, provided or not with a retractive spring, C, constructed, combined, and arranged substantially as and to operate as specified.

2. The combination of the pawl trippers or triggers *c d* on the pawls F G with the frame A, the rack B, the toggle H, the pitman L, and lever K, all as and to operate as set forth.

HELM CHILSON.

Witnesses:

R. H. EDDY,
J. R. SNOW,