

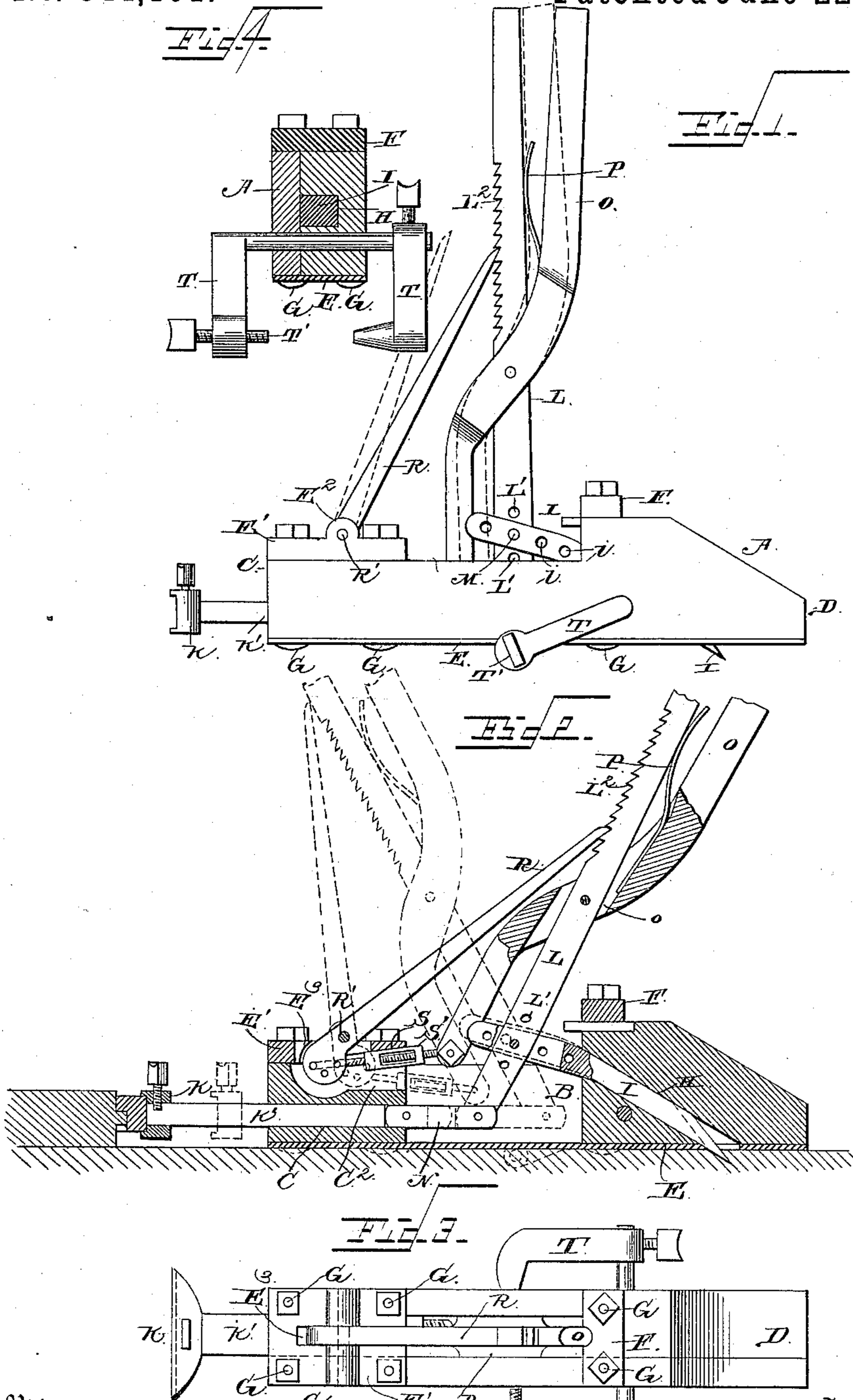
(No Model.)

J. GIFT.

CLAMP.

No. 344,101.

Patented June 22, 1886.



Witnesses
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UNITED STATES PATENT OFFICE.

JONATHAN GIFT, OF STAR, WISCONSIN.

CLAMP.

SPECIFICATION forming part of Letters Patent No. 344,101, dated June 22, 1886.

Application filed March 20, 1886. Serial No. 195,987. (No model.)

To all whom it may concern:

Be it known that I, JONATHAN GIFT, a citizen of the United States, residing at Star, in the county of Vernon and State of Wisconsin, have invented a new and useful Improvement in Flooring-Clamps, of which the following is a specification, reference being had to the accompanying drawings.

My invention relates to an improvement in flooring-clamps; and it consists in the peculiar construction and combination of devices that will be more fully set forth hereinafter, and particularly pointed out in the claims.

In the drawings, Figure 1 is a side elevation of my invention. Fig. 2 is a vertical longitudinal sectional view showing the levers in another position. Fig. 3 is a top plan view. Fig. 4 is a transverse sectional view.

A represents the frame of the clamp, which is provided with a vertical central longitudinal slot or opening, B, thereby forming heads C and D at its front and rear extremities, respectively. On the underside of the frame is a plate, E, which extends throughout the length of the frame, and on the upper side of the latter, at its front end, is secured a plate, E', which covers the head C, and on the rear upper side of the said frame is a plate, F, which covers the upper side of the head D. Clamping-bolts G extend through the plates and the extremities of the frame, so as to secure them together, as shown. In the rear head, D, is made an opening or channel, H, which extends rearwardly and downwardly through the said head and communicates with the front and lower sides thereof. Through this channel passes a detent, I, the lower end of which is sharpened, and passes through an opening that is made in the bottom plate, E, near the rear end thereof, and the upper end of the said detent is bifurcated and is provided with a series of openings, i. Through the front head, C, is made a longitudinal groove or channel, C', in which works the rear extended stem, K', of the clamping-head K.

L represents a hand-lever, which is provided at a suitable distance from its lower end with a series of openings, L'; and the front side of this lever, near its upper end, is provided with a series of ratchet-teeth, L². The hand-

lever L is pivoted between the arms formed by the bifurcated upper end of the detent I, by means of a pin, M, which passes through one of the openings i and one of the openings L'. The lower end of the lever L is connected to the inner end of the stem K' by means of a link, N, the said link being pivoted to the lever and to the stem.

O represents a lever, which is fulcrumed on the hand-lever L the said lever O being provided with an opening, o, through which the lever L passes, the lever O being curved, as shown in Figs. 1 and 2, so as to have its upper end extending on the rear side of the upper end of the lever L and its lower end extending on the front side of the lower end of the said hand-lever L. A flat bearing-spring, P, is secured to the lever O, which bears against the rear side of the lever L.

The plate E' on the upper side of the head C is provided with projecting lugs E², and between the said lugs is made a slot or opening, E³, which communicates with a longitudinal slot, C², which extends through the rear side of the head C.

R represents a pawl, which is pivoted near its lower end between the lugs E² on a pin, R', which extends through the said lugs, the lower end of this pawl extending into the opening C², and it is connected to the lower end of the lever O by means of an extensible coupling, S. This coupling is composed of a right and a left hand screw, which are connected together by a swivel, S'. By turning the swivel in one direction the coupling will be lengthened, and by turning it in the reverse direction the coupling will be shortened, as will be readily understood.

The spring P which bears between the levers B and O, cause their upper ends to normally diverge, and as the pawl R is connected to the lower end of the lever O, the said pawl has its upper end moved rearwardly, and is thereby caused to normally engage with the hand-lever L.

The operation of my invention is as follows: With the levers L and O moved forward, the frame A is located on the upper side of the joist, with the clamping-head K bearing against the outer edges of the flooring-board

which is to be forced into position. By moving the hand-lever rearward the detent I is forced downward and caused to engage with the joist, and thus secure the clamp against rearward movement, and at the same time the head K is moved forward, pressing the board into position. Then, when the board is nailed, the operator, wishing to remove the clamp, with one hand presses the levers L and O together against the resilience of the spring P, which causes the lower end of the pawl to be moved rearwardly and its upper end to be moved forwardly and out of engagement with the ratchet-teeth L^2 , thus disengaging the clamp.

In order to adapt the clamp to be used for ceiling and partitioning, I provide the clamping-arms T, which are pivoted to either end of the frame A and are movable laterally on opposite sides thereof. One of the arms T is provided with a clamping-screw, T'. By means of these arms and the clamping-screw the frame A may be secured to a stud or on the under side of a rafter, and thus maintained in position thereon while the hand-lever is being operated, as previously described.

Having thus described my invention, I claim—

1. The combination of the frame A, the sliding keeper I, the hand-lever fulcrumed thereto, the movable head connected to and

actuated by the hand-lever, the pawl R, engaging the hand-lever, and the extensible coupling S, connecting the pawl and the lever O, substantially as described.

2. The combination of the frame A, the sliding keeper I, the hand-lever fulcrumed thereto, and having the teeth L^2 , the lever O, fulcrumed to the hand-lever, the spring bearing between the lever O and hand-lever, the movable clamping-head connected to and actuated by the hand-lever, and the pawl engaging the teeth L^2 of the said lever, the said pawl being connected to and actuated by the lever O, substantially as described.

3. The combination of the frame A, the sliding keeper I, the hand-lever fulcrumed thereto, the movable clamping-head connected to and actuated by the hand-lever, the lever O, fulcrumed to the lever L, and the pawl R, for engaging with the said lever L, the said pawl being connected to and actuated by the lever O, for the purpose set forth, substantially as described.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in presence of two witnesses.

JONATHAN GIFT.

Witnesses:

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