(No Model.)

G. H. DUVALL.

FLOOR PLANK CLAMP.

No. 280,152. Patented June 26, 1883.

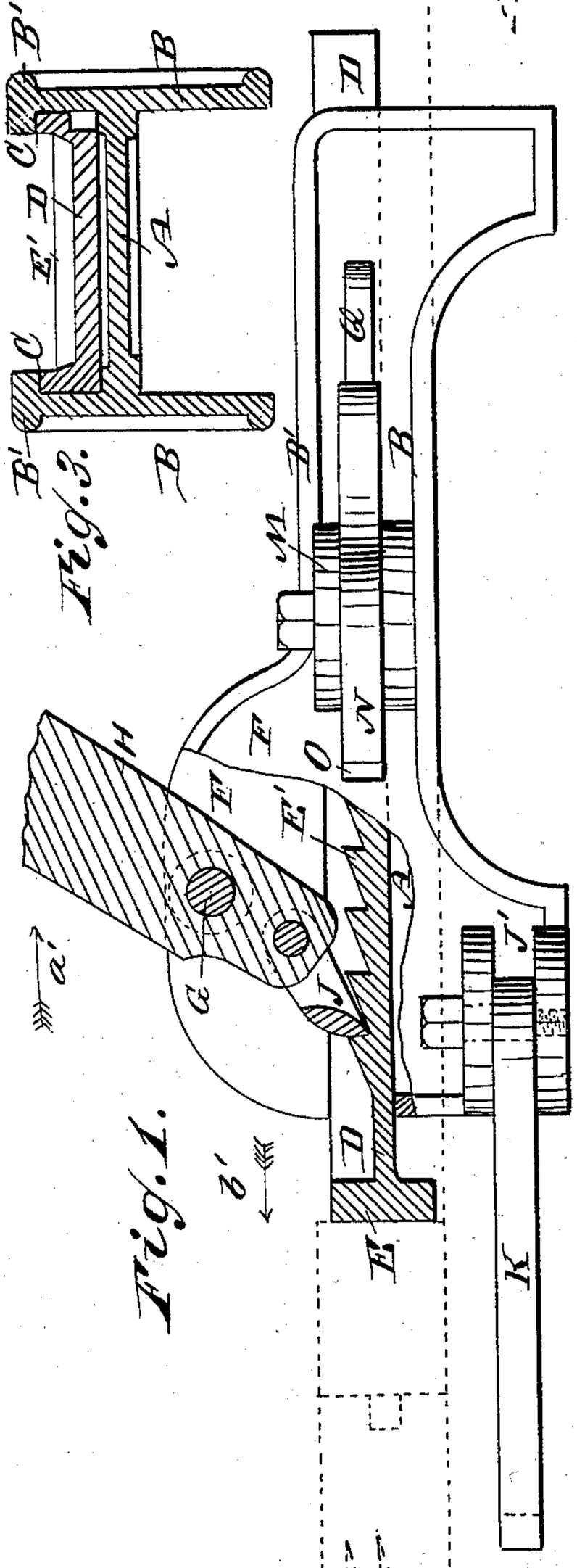

Fig. 3.

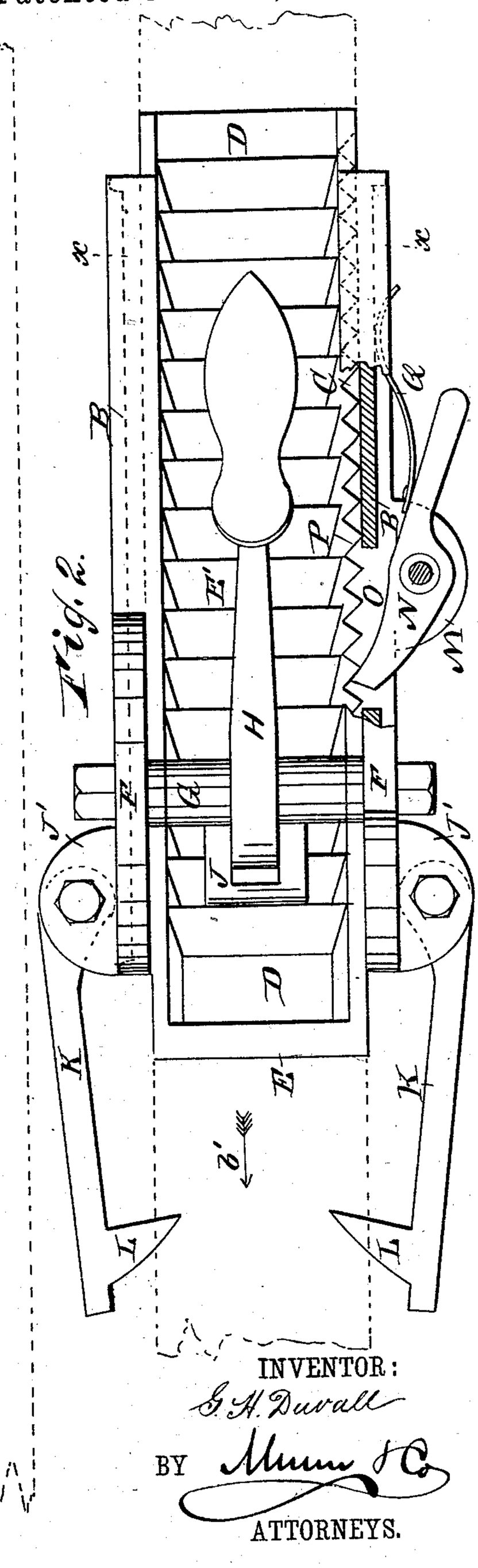

Fig. 2.

Fig. 1.

WITNESSES:

Theo. G. Hoster

C. Sedgwick

INVENTOR:

G. H. Duvall

BY Munn & Co

ATTORNEYS.

UNITED STATES PATENT OFFICE.

GRAFTON H. DUVALL, OF PHILADELPHIA, PENNSYLVANIA, ASSIGNOR OF ONE-HALF TO BANNER THOMAS, OF SAME PLACE.

FLOOR-PLANK CLAMP.

SPECIFICATION forming part of Letters Patent No. 280,152, dated June 26, 1883.

Application filed March 22, 1883. (No model.)

To all whom it may concern:

Be it known that I, GRAFTON H. DUVALL, of Frankford, Philadelphia, in the county of Philadelphia and State of Pennsylvania, have invented a new and Improved Floor-Plank Clamp, of which the following is a full, clear, and exact description.

The object of my invention is to provide a new and improved device for pressing floor-planks together before nailing them to the beams.

The invention consists in a frame containing a sliding rack-plate, the end of which can be pressed against the edge of the end plank by means of a pivoted lever having a pivoted pawl engaging with the rack. The frame is provided with two laterally-swinging arms having prongs which can be driven into the beam for holding the frame in place, and the frame is also provided with a pawl-lever for automatically locking the sliding rack-plate in place on the frame.

Reference is to be had to the accompanying drawings, forming part of this specification, in which similar letters of reference indicate corresponding parts in all the figures.

Figure 1 is a longitudinal elevation of my improved floor-plank clamp, parts being broken out and others shown in section. Fig. 2 is a plan view of the same, parts being broken out and others shown in section. Fig. 3 is a cross-sectional elevation of the same on the line *x x*, Fig. 2.

A plate, A, is provided at each longitudinal edge with a side plate, B, projecting above and below the plate A. The side plates are provided along the upper edge with inwardly-projecting flanges B′, forming grooves C for receiving the longitudinal edges of a plate, D, adapted to slide on the plate A, and provided at the front end with a transverse head, E. On the upper surface of the sliding plate D a rack, E′, is formed, having its teeth inclined toward the head E. On the front end of the upper edges of the side plates, B, jaws F are formed, in which a shaft, G, is journaled, on which a lever, H, is rigidly mounted, to the lower end of which lever a pawl, J, is journaled, which is adapted to engage with the teeth of the rack E. On the front end of each side plate, B, laterally-projecting jaws J′ are formed, in which jaws laterally-swinging arms K are pivoted, each of which is provided at the outer end with an inwardly-projecting prong or spur, L. About at the middle of one side plate, B, laterally-projecting jaws M are formed, in which a pawl-lever, N, is journaled, the inner end of which passes through a slot, O, to the side plate to engage with a rack, P, formed on one of the longitudinal edges of the plate D. A spring, Q, attached to the outer end of the pawl-lever M, presses the inner end of the same against the teeth of the rack P. The plate A is placed on the upper edge of a beam in such a manner that the lower parts of the side plates, B, rest against the sides of the beam, and then the spurs L are driven into the sides of the beam for the purpose of holding the plate A in place on the beam. If the lever H is moved in the direction of the arrow *a′*, the pawl J catches on the teeth of the rack E′ on the plate D and moves the same in the direction of the arrow *b′*. The head E presses against a strip placed against the edge of the floor-planks to protect the same from being injured, and thereby the floor-planks are pressed together and can then be nailed down. The sliding plate D is locked in place by the pawl-lever N. If the plate D is to be withdrawn in the inverse direction of the arrow *b′*, the outer end of the pawl-lever N is pressed against the side plate for the purpose of disengaging the inner end of the pawl-lever from the rack P. By means of the lever H great power can be exerted and the planks can be pressed very firmly together.

I am aware that a floor-clamp having its body slotted longitudinally to receive a serrated sliding bar operated by a lever having an actuating-pawl at its end, the body being provided with spurs to retain it in any desired position in laying floors, has heretofore been employed, and I therefore lay no claim to such invention. In my invention, by the employing of the laterally-swinging arms provided with prongs, the body of the floor-clamp can be differently and more readily and securely fastened to a beam, and much more readily unfastened than when spurs are employed.

Having thus described my invention, what I

claim as new, and desire to secure by Letters Patent, is—

1. In a floor-plank clamp, the combination, with a frame fitting on the beams and provided with laterally-swinging pronged arms for holding it in place, of a rack-plate sliding in the frame, and a pivoted lever provided with a pawl engaging with the rack-plate, substantially as herein shown and described, and for the purpose set forth.

2. In a floor-plank clamp, the combination, with the plate A, having sides forming guide-grooves C, of the sliding rack-plate D, having a head, E, the pivoted lever H, the pawl J, pivoted to the same, and the laterally-swinging arms K, provided with prongs L, substantially as herein shown and described, and for the purpose set forth.

GRAFTON HENRY DUVALL.

Witnesses:

J. W. HAMPTON, Jr.,

F. B. VANDEGRIFT.