

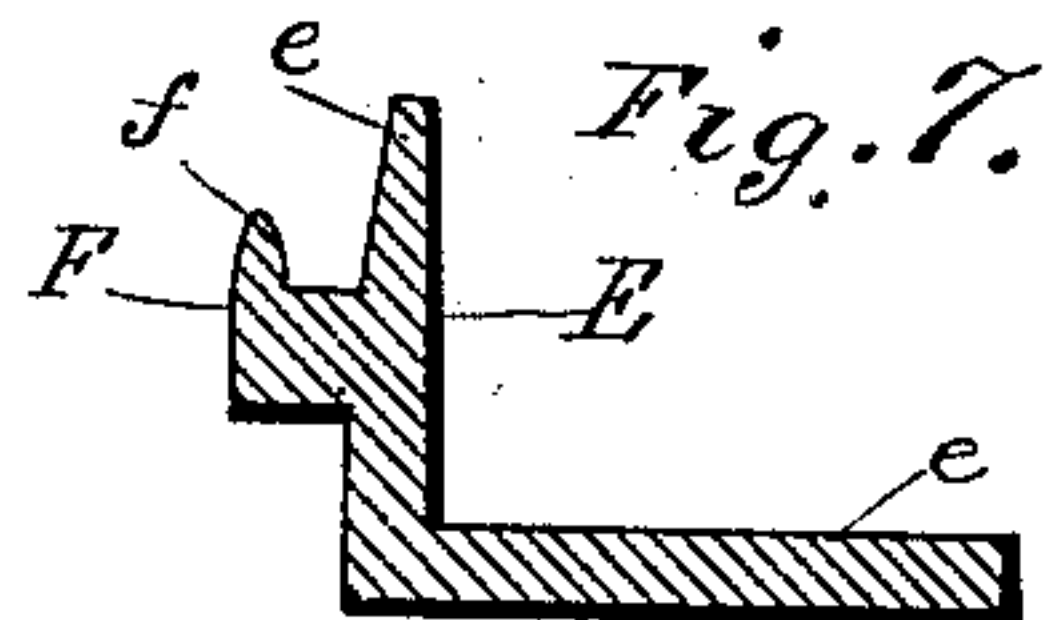
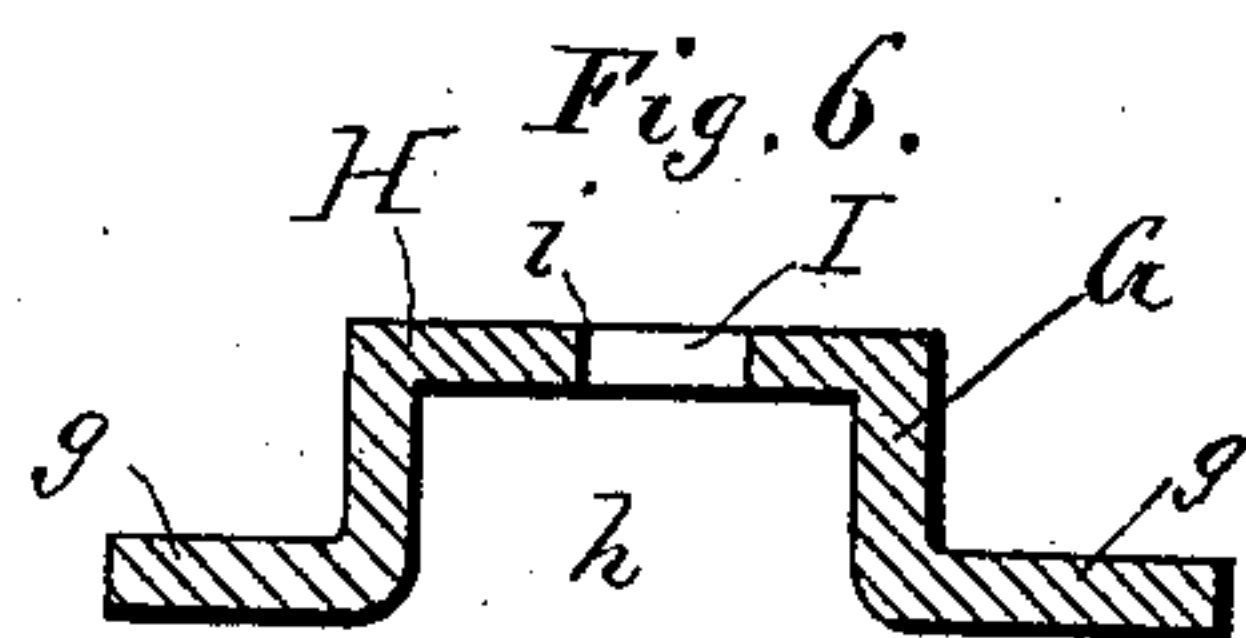
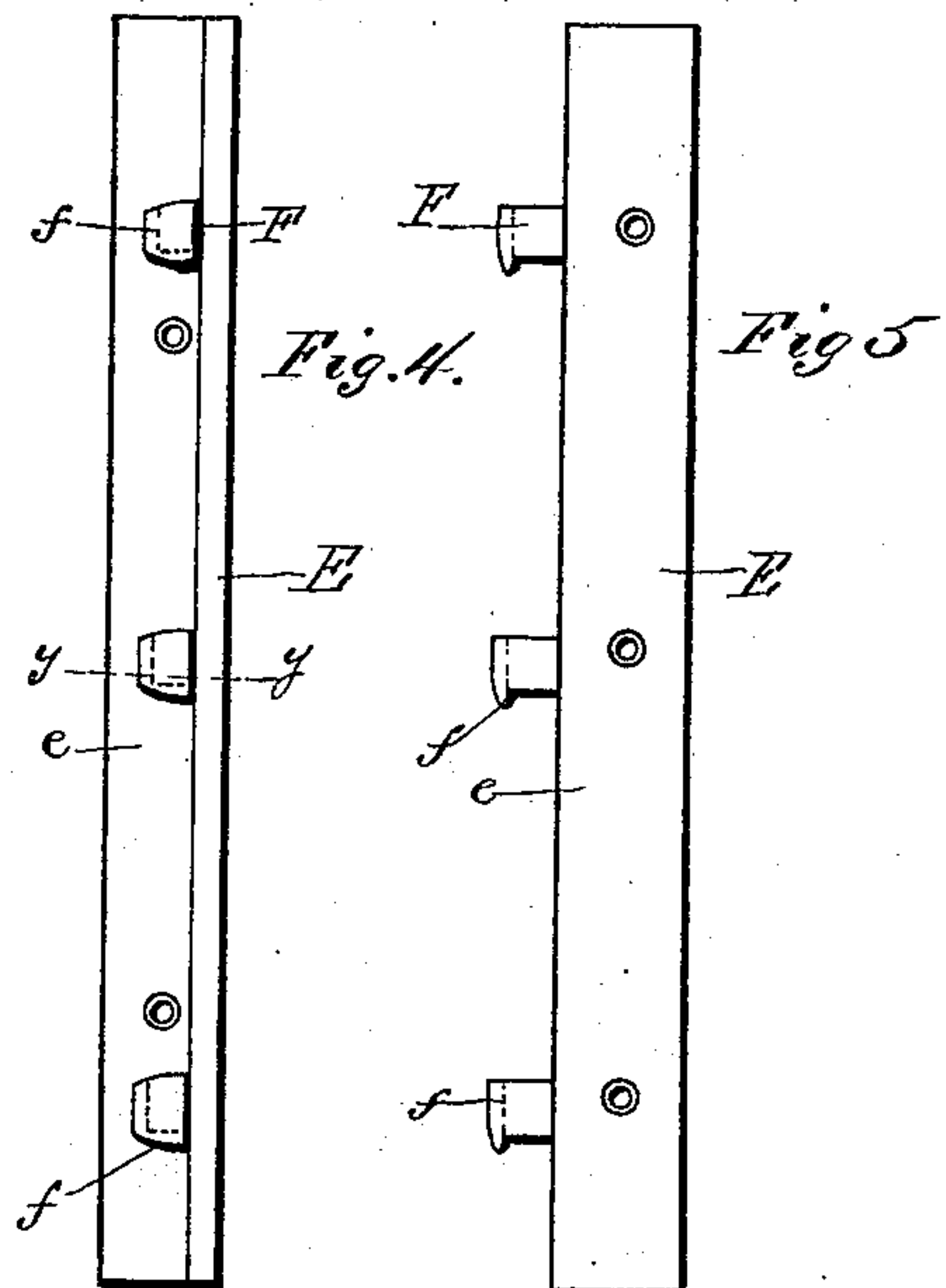
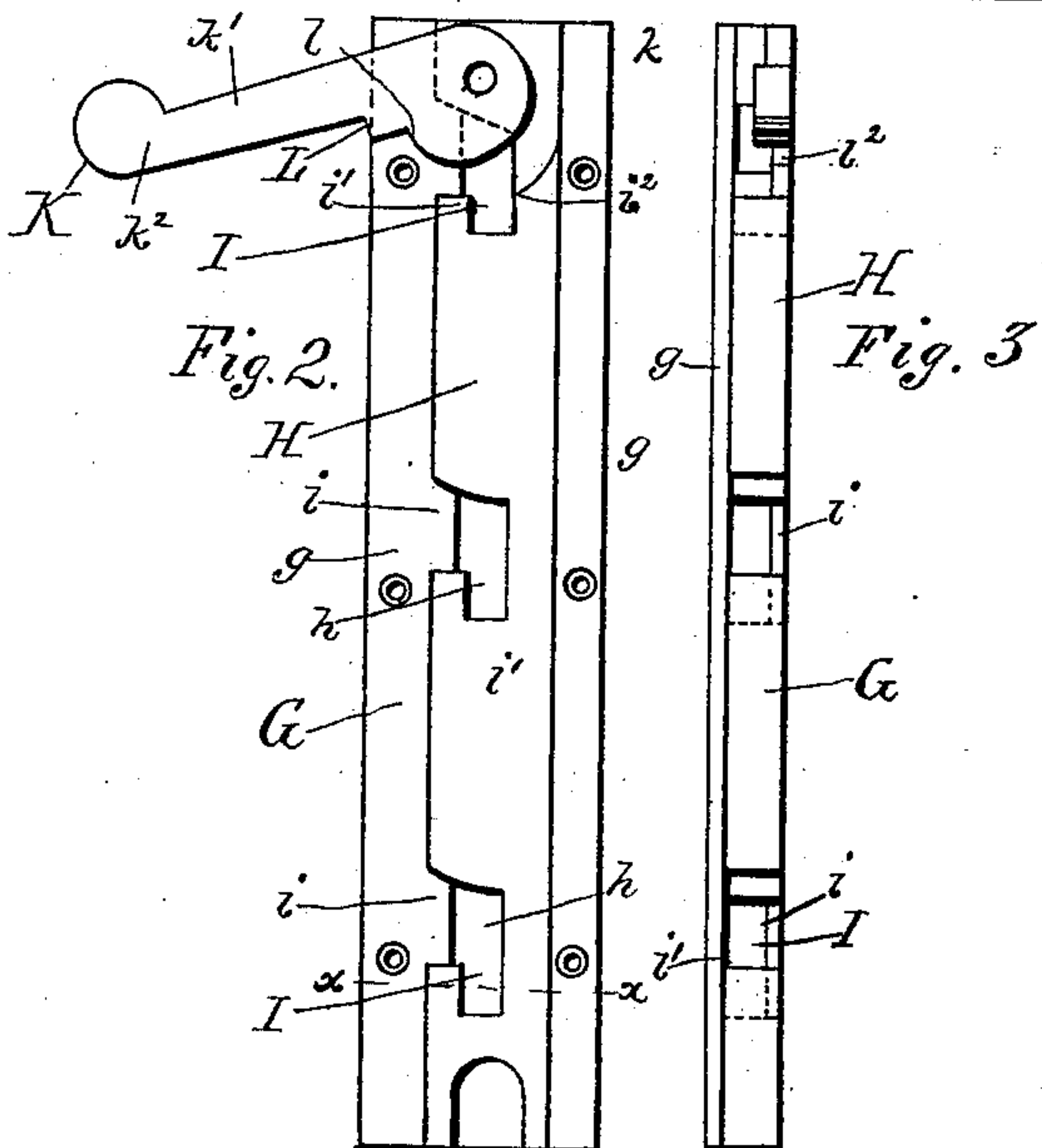
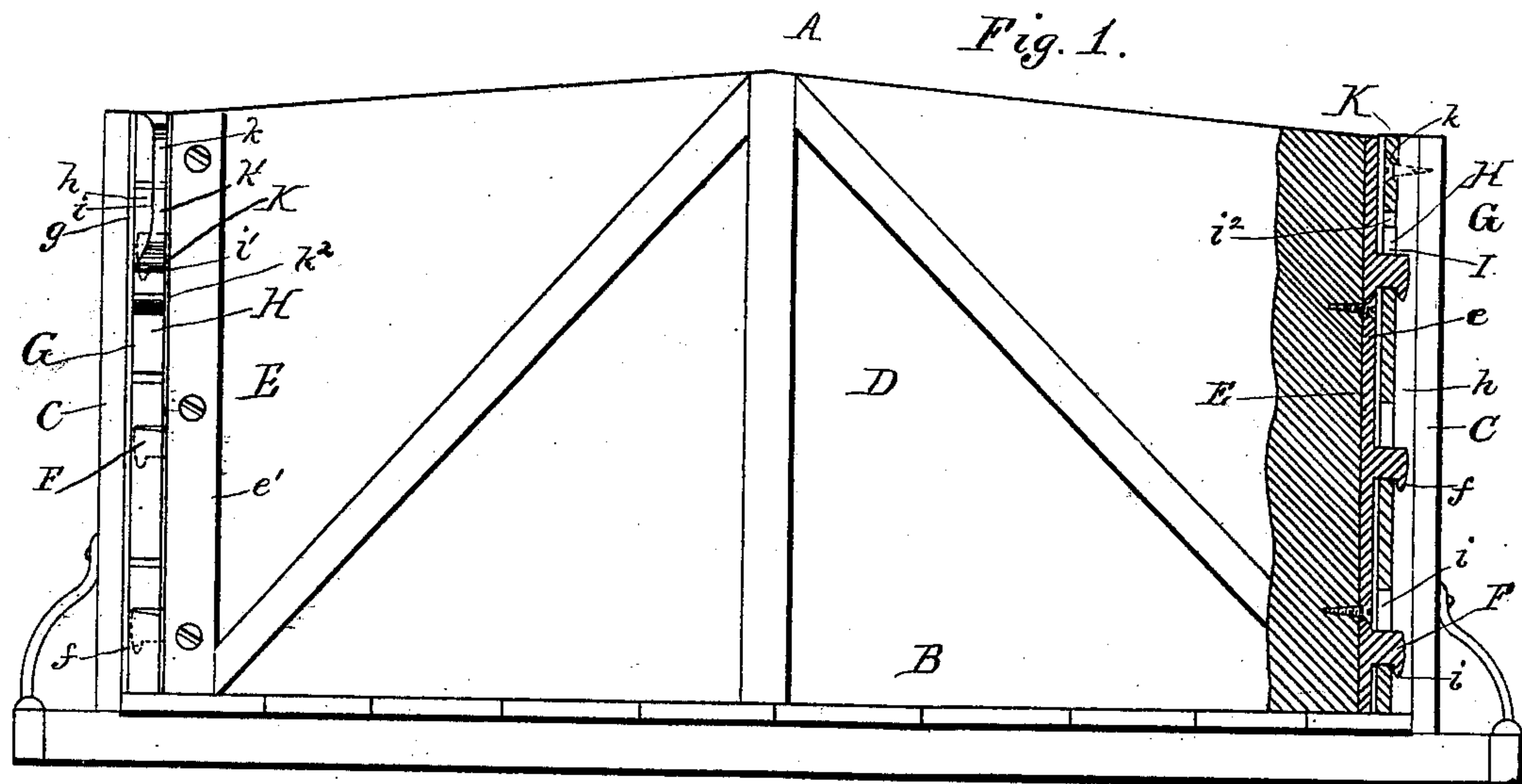
(No Model.)

J. CLAYTON.

END GATE.

No. 376,405.

Patented Jan. 10, 1888.



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END-GATE.

SPECIFICATION forming part of Letters Patent No. 376,405, dated January 10, 1888.

Application filed April 27, 1887. Serial No. 236,328. (No model.)

To all whom it may concern:

Be it known that I, JOHN CLAYTON, a citizen of the United States, residing at Wadena, in the county of Wadena and State of Minnesota, have invented certain new and useful Improvements in Devices for Securing End-Boards of Wagon-Boxes; and I do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to letters or figures of reference marked thereon, which form a part of this specification.

Figure 1 of the drawings is a representation of an end-board of a wagon with my improved fastener partly shown in section. Fig. 2 is a front view of the female part of my improved fastener. Fig. 3 is an end view of same. Fig. 4 is a front view of male part of my fastener. Fig. 5 is an end view of same. Fig. 6 is a transverse section on line *x x*, Fig. 2. Fig. 7 is a transverse section on line *y y*, Fig. 4.

The invention relates to improvements in devices for securing the end-boards or tail-boards of carts or wagons, the object being to provide simple, strong, durable, and effective means for locking the board in the rear end of the vehicle; and it consists in the construction and novel combination of parts, as hereinafter set forth.

Referring to the accompanying drawings, A designates the rear end of a cart-body, provided with the floor B and the sides C C, of usual construction.

D is the end-board, having secured to each side edge a clip, E, rectangular in cross-section, with its outer flange, *e*, resting against the edge of the board and its flange *e'* resting against the rear surfaces of the same, the said flanges being secured in position by screws passing through suitable openings made in them, which openings are countersunk to allow the heads of the screws to rest flush with the outer surfaces of the respective flanges.

F F are projections or lugs standing outward from the flange *e*, and preferably angular in cross-section, which have upon the inner and lower edges of their ends the flanges *f f*, for a purpose hereinafter explained. The upper and lower sides of the lugs F are in practice

made slightly converging inward to more easily insert them into their keeping-slots, hereinafter described.

G G are vertical metal plates secured to the inner surfaces of the sides C, adjoining the ends thereof, by screws passing through countersunk openings in the side flanges, *g g*, the heads of the screws being flush with the surfaces of said flanges. The plates G are each provided with the central raised portion, H, forming between itself and the inner surface of the corresponding side C the vertical space *h*.

I I are longitudinal slots of general rectangular shape made in the raised portion H, and having the outer side edge of the said portion cut away or notched out flush with the adjoining flange *g* at *i i* from the tops of the slots to a proper distance above the lower ends. The continuous upper edges of said notches and slots incline slightly upward rearwardly, so that the flanged lugs can be more easily inserted into the slots through the notches and the lower ends of the notches make rectangular shoulders *i'* with the slots. The highest slot I has a shoulder, *i''*, curved inwardly and upwardly on its inner side, which shoulder is not continued down to the adjacent plate *g*, and is opposite to and slightly higher than the shoulder *i'* of the highest slot. The flanged projections and the slots I are preferably equidistant and register with each other, so that the lugs or projections can be passed through the notches *i* and will face downward on the slots, their flanges engaging in the space *h* against the inner surfaces of the lower ends and front sides of the slots. The clips and plates are preferably of cast metal, and the former have their corner edges beveled, so as to pass easily inward between the plates.

K K are clamp-levers having the rounded plate portions *k* and the projecting arms *k'*, which have flat knobs *k''* on their ends as thick as the raised parts H of the plates G are high, so as to fit snugly in between the outer flange *g* and the adjacent edge of the end-board when the arm is turned down. The plate *k* of the clamp-lever on each side is pivoted eccentrically through a countersunk opening near its upper edge on a screw secured to the plate G centrally above the highest notch I, and forms a shoulder, L, with its arm *k*, which

shoulder rests, when the said arm is turned down, on the shoulder *i'* of said notch.

l is a shoulder formed on the edge of the plate *k* a sufficient distance above the shoulder *L* to permit said edge to bear on the shoulder *i''* and on the upper side of the highest lug when inserted in the corresponding slot *I* and hold the said lug securely in place. Thus, when the two clamp-levers are turned down, the lugs are all held in the slots and the end-board locked in the end of the cart.

To insert and remove the end-board, the clamping-levers are turned vertically upward, so that the lugs can pass under the normally upper edges, which are the nearest point to the pivoted screws.

Having described this invention, what I claim, and desire to secure by Letters Patent, is—

1. The combination of an end-board, having lugs standing from its side edges and entering slots in the adjacent sides of the cart, and the clamp-levers having plates pivoted eccentrically to the cart-sides, so that when turned down the said plates will hold the lugs down in the slots, the edges of the plates resting on the upper surfaces of the slots.

2. The combination of the end-board, the clips secured thereto and provided with outstanding lugs on their flanges covering the side edges of the end-board, the plates secured to the sides of the cart, provided with the slots *I* and notches *i*, and the clamp-levers having their plates pivoted eccentrically, so that when their arms are turned down the plate portions will hold the lugs down in the corresponding slots, substantially as specified.

3. The combination of the end-board, the clips *E*, attached thereto and provided with the lugs *F*, having the flanges *f f*, the plates *G*, secured to the sides of the cart, provided with the flanges *g g*, slots *I*, notches *i*, and shoulders *i'* and *i''*, and the clamp-levers *K*, having the plate portions *k*, pivoted eccentrically above the highest slots *I*, the arms *k'*, and the shoulders *L l*, all constructed and arranged substantially as and for the purpose specified.

In testimony whereof I affix my signature in presence of two witnesses.

JOHN CLAYTON.

Witnesses:

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JOHN K. MILLER.