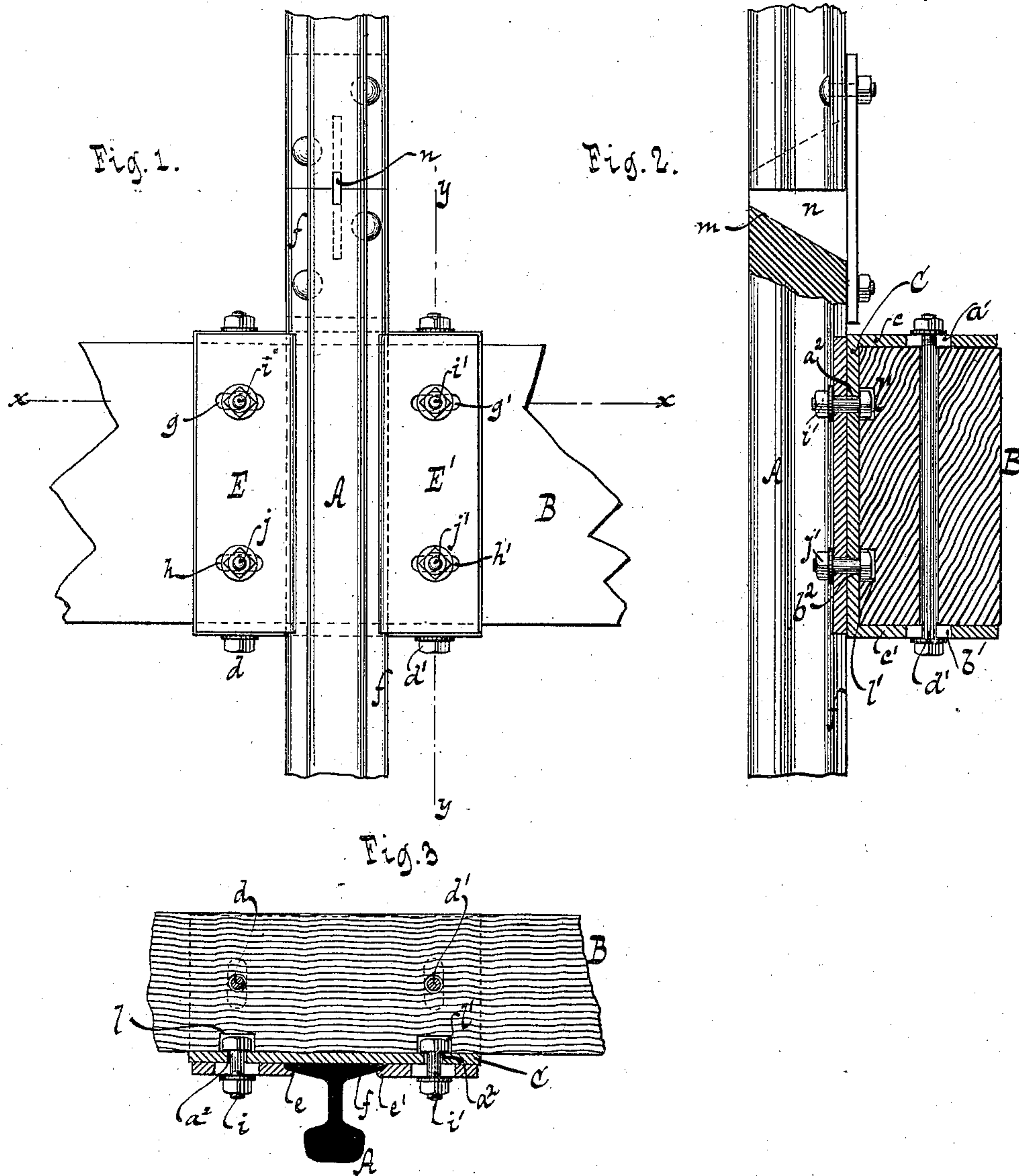


(No Model.)

C. G. OTIS.
CHAIR FOR ELEVATOR GUIDE POSTS.

No. 310,713.

Patented Jan. 13, 1885.



WITNESSES:

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CHARLES G. OTIS, OF BROOKLYN, NEW YORK.

CHAIR FOR ELEVATOR GUIDE-POSTS.

SPECIFICATION forming part of Letters Patent No. 310,713, dated January 13, 1885.

Application filed November 20, 1884. (No model.)

To all whom it may concern:

Be it known that I, CHARLES G. OTIS, a citizen of the United States, residing at Brooklyn, in the county of Kings and State of New York, have invented new and useful Improvements in Chairs for Elevator Guide-Posts, of which the following is a specification.

My invention relates to improvements in chairs for adjustably securing the guide-posts of elevators; and it consists in the combination, with the guide-post, of a chair composed of a support adjustably secured to one of the horizontal beams forming the frame-work of the hoistway and clamping jaws adjustably secured to the support.

In the accompanying drawings, Figure 1 is an elevation of my improved chair as applied to an elevator. Fig. 2 is a vertical section in the plane $y y$, Fig. 1. Fig. 3 is a horizontal section in the plane $x x$, Fig. 1.

Similar letters indicate corresponding parts.

In the drawings, the letter A designates one of the guide-posts, which consists of ordinary iron or steel rails secured together end to end.

B is one of the horizontal beams which form the frame of the hoistway.

C is the support which forms part of the chair. This support is by preference made L-shaped, and it is provided with slots $a a'$ and $b b'$, which run transversely across each of the flanges c and c' of said support.

$d d'$ are bolts which extend through the slots $a a'$ and $b b'$ and the beam B, and when said bolts are screwed up the L-shaped support C is held firmly in position; but when the bolts are loosened, the L-shaped support can be drawn outward from the beam B to an extent limited by the length of the slots $a a'$ and $b b'$.

E E' are two metal plates or clamping-jaws, the longitudinal edges $e e'$ of which are chamfered off to conform to the shape of the flange f of the guide-post A, Fig. 3. These clamping-jaws are provided each, respectively, with two or more transverse slots, $g g'$ and $h h'$, through which slots pass bolts $i i'$ and $j j'$, said bolts also passing through corresponding holes, $a^2 b^2$, in the L-shaped support C, and the heads of the bolts are received in cavities $l l$ and $l' l'$ in the beam B. When the bolts $i i'$ and $j j'$ are screwed up, the clamping-jaws E E' are pressed down firmly upon the flange f of the guide-post A, so as to hold the same firmly in position, and when the bolts are

loosened the clamping-jaws E E' can be shifted on the L-shaped support to the limits of the slots $g g'$ and $h h'$.

The guide-post A, as before mentioned, is made up of several rails, and in order to obtain a smooth continuous guide-post, the two adjoining ends of the rails have milled into them longitudinal slots m , Fig. 2. Into these slots m extends a tongue, n , formed on or secured to a plate, o , said plate being bolted or otherwise secured to the flanges of the respective rails. The upper surface of the tongue n comes flush with the surface of the rails, and consequently there can be no appreciable abrading of the ends of the rails.

It is a well-known fact that the hoistways of elevators are apt to get out of shape, owing to the warping and springing of the timbers forming the hoistways, or from other causes. When the hoistways are thus thrown out of shape, the guide-posts are usually thrown out of line with each other, and also distorted, which causes the elevator-car to bind. On such an occurrence it requires considerable time to line up the guide-posts; but with my improved method of securing the guide-posts it is simply necessary to adjust the clamping-jaws E for side adjustment, and, if necessary, the L-shaped support C for inward or outward adjustment.

As shown in the drawings, my chairs are designed for hoistways of square or rectangular cross-section, said chairs being placed on the sides of the squares or rectangles; but they can be placed in diagonally-opposite corners of the square or rectangle by making suitable alterations in their shape, and they can also be used in hoistways of different cross-sections.

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

The combination, substantially as hereinbefore described, with the guide-post A, of the chair composed of the support C, adjustably secured to one of the beams forming the frame of the hoistway, and the clamping-jaws E E', adjustably secured to the support.

In testimony whereof I have hereunto set my hand and seal in the presence of two subscribing witnesses.

CHAS. G. OTIS. [L. S.]

Witnesses:

W. HAUFF,

E. F. KASTENHUBER.