(No Model.)

P. H. JACKSON.

IRON AND ILLUMINATING STAIRS.

No. 269,863. Patented Jan. 2, 1883.

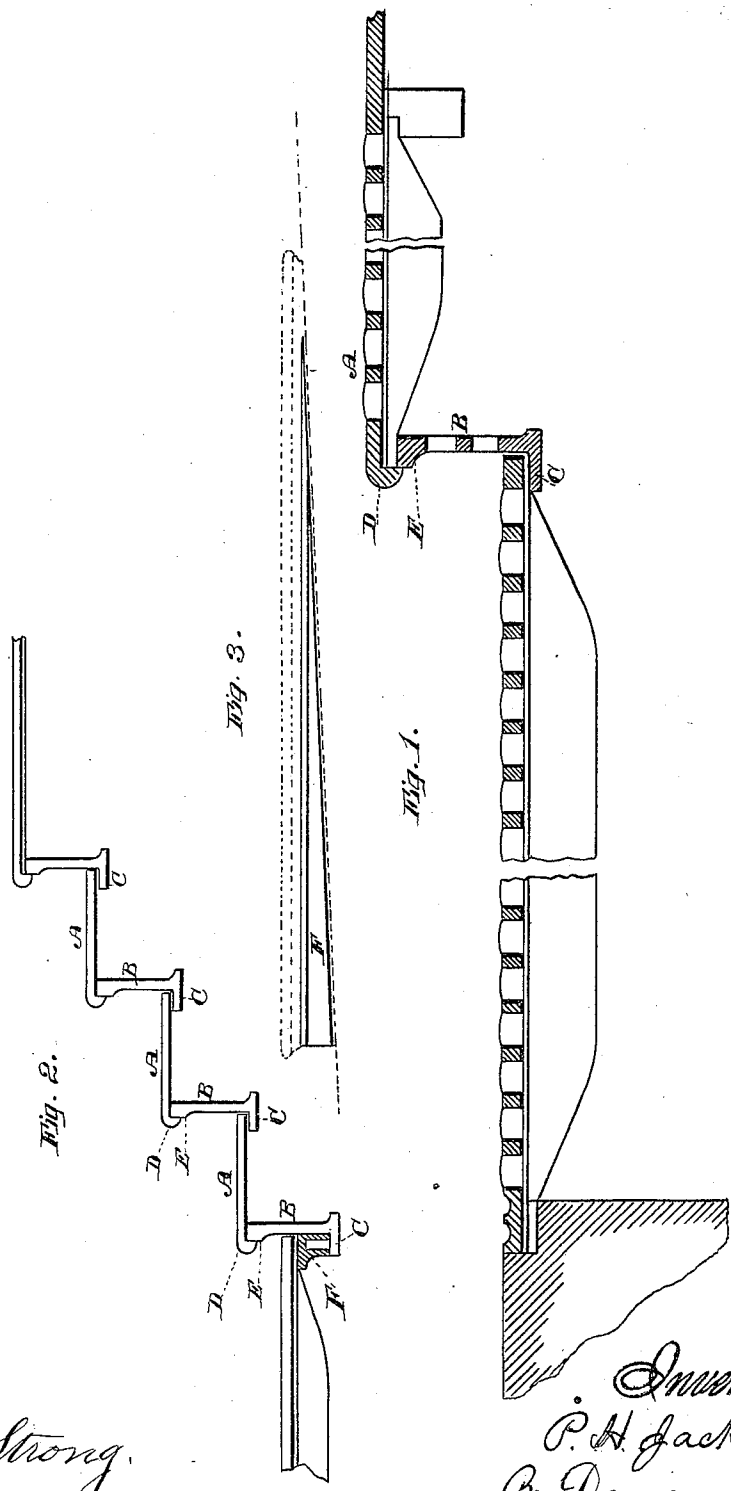

Fig. 1.

Fig. 2.

Fig. 3.

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UNITED STATES PATENT OFFICE.

PETER H. JACKSON, OF SAN FRANCISCO, CALIFORNIA.

IRON AND ILLUMINATING STAIRS.

SPECIFICATION forming part of Letters Patent No. 269,863, dated January 2, 1883.

Application filed April 4, 1882. (No model.)

To all whom it may concern:

Be it known that I, PETER H. JACKSON, of the city and county of San Francisco, State of California, have invented an Improvement in Iron and Illuminating Stairs; and I hereby declare the following to be a full, clear, and exact description thereof.

My invention relates to certain improvements in the construction of iron and illuminating stairs; and it consists in so forming the risers of the stairs that the inner edges of the tiles or steps are supported upon their projecting flanges, no intermediate support being necessary, and a part of the finish under the projection of the step is supplied. The molding which forms the finish of the front edge is partly formed upon the edge of the step and partly upon the riser. The bottom riser is made of the full depth, and the grade of the street is conformed to by a tapering filling-in piece which rests upon the lip of the riser, its upper edge supporting the inner side of the tile.

Referring to the accompanying drawings for a more complete explanation of my invention, Figures 1 and 2 are sectional views of my invention. Fig. 3 is a view of the filling-in piece.

A is the tile or step forming the tread, and B the riser, of the stairs. These risers have the lower edge made with a projecting lip, C, upon which the inner edges of the steps are supported throughout their whole length, and to which they may be fastened. By this construction the riser forms what is known as a Thairburns beam, and gives such strength to the stairs that no intermediate supports or string-pieces are needed, and the whole length of each step is left uninterrupted, so that when they are formed of illuminating-tiles the light will not be intercepted. In finishing iron steps the ornamental molding must either be formed separate and secured to the angle of the step or it must be cast with the step. If formed in the latter manner, the depth of metal is so great in the larger-sized moldings that it subjects the tile to great strain and danger of rupture, besides warping it.

In my construction the front edge of the step or tile has a rounded or ornamental molding, D, cast upon it, while the remainder of the molding, E, is cast upon the riser, thus dividing the amount of metal and reducing the strain upon either part, while giving a maximum depth of molding.

Whenever the street or sidewalk is inclined so that the lower step is deeper at one end than at the other, the bottom riser is made of the full depth for its whole length, and the projecting flange or lip C has a tapering filling-in piece or beam, F, fitted upon it, and shaped or tapered to conform to the exterior grade; or, where the riser is not deep enough for strength, the fill-up piece allows the riser to be of proper depth for strength. This filling-in piece may run out to a point at one end without in any way reducing the strength of the step, as the riser proper is always made of the full depth, and it thus gives a good finish to the rear lower portion of the steps.

The upper edge of the filling-in piece serves to support the inner edges of the plates or tiles forming the surface of the sidewalk at that point, and they may be bolted to it, this piece serving in all respects as the supporting-beam for the inner ends of the tiles.

Having thus described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. The riser B for iron stairs, having the lip or flange C formed at the lower edge, and the molding-strip or finish E at the top and forming a part of it, in combination with the tile or tread A, with its front edge molding, D, substantially as and for the purpose herein described.

2. In an iron stairway, the riser B, having the flange or projection C at the base, in combination with the tapering filling-in piece or panel F, conforming to the grade of the street and forming a support for the area-tiles, substantially as herein described.

In witness whereof I have hereunto set my hand.

PETER H. JACKSON.

Witnesses:

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