J. SIMONSON.

Railway Platform-Guard.

No. 214,202. Patented April 8, 1879

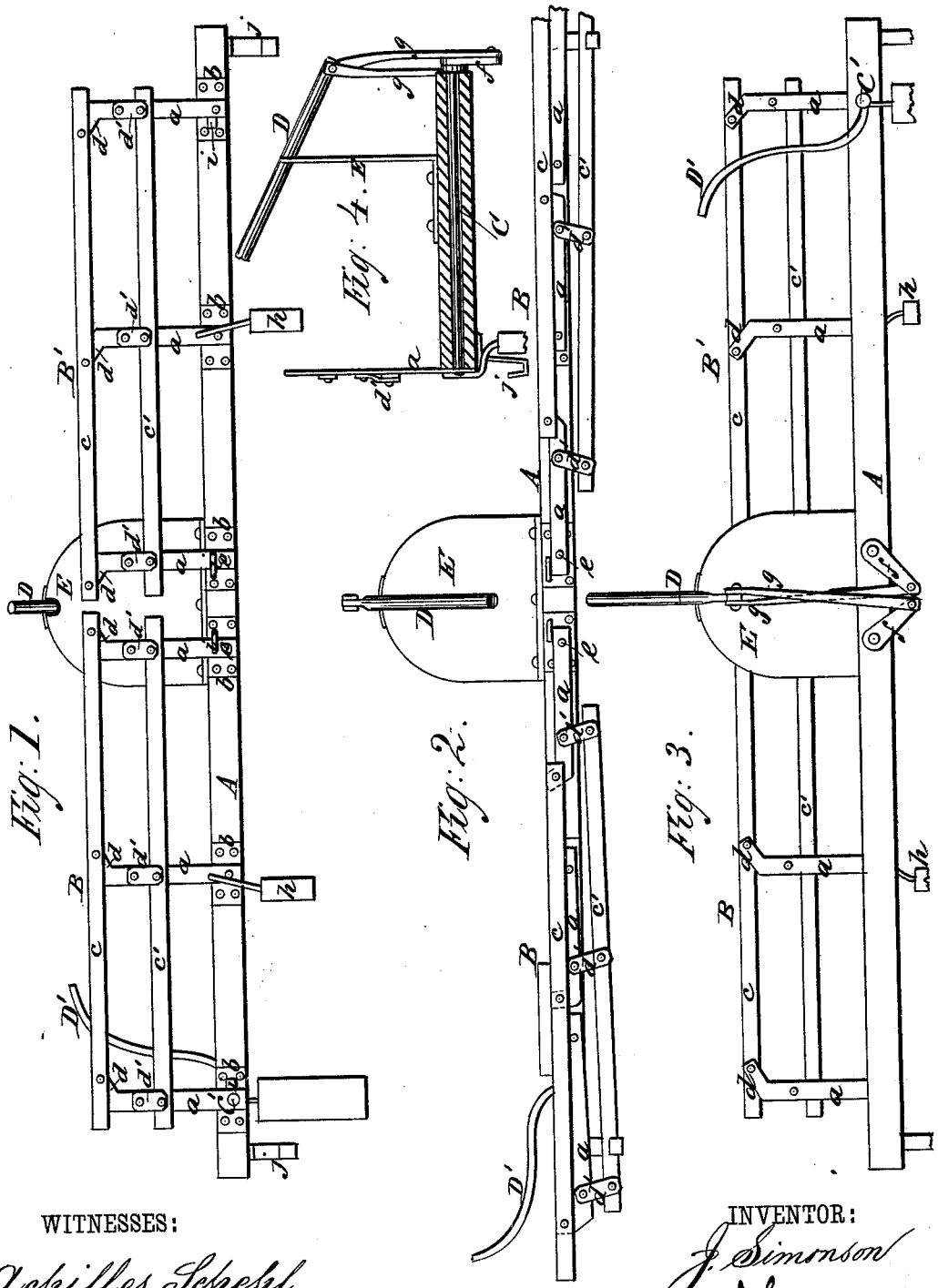

Fig. 1.

Fig. 2.

Fig. 3.

Fig. 4.

WITNESSES:

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JACOB SIMONSON, OF NEWARK, NEW JERSEY.

IMPROVEMENT IN RAILWAY-PLATFORM GUARDS.

Specification forming part of Letters Patent No. **214,202**, dated April 8, 1879; application filed February 6, 1879.

To all whom it may concern:

Be it known that I, JACOB SIMONSON, of Newark, in the county of Essex and State of New Jersey, have invented a new and Improved Railway-Platform Guard, of which the following is a specification.

The object of this invention is to furnish railway-platforms with a guard or railing that will effectually protect passengers standing on the platforms against falling or being pushed off the same, but which is arranged to be folded out of the way quickly and easily, to permit the passengers to pass from the platform to the cars.

It consists of bars pivoted together so as to fold up closely, the upright bars being pivoted to the edge of the platform and connected by rods and cranks with a lever or levers, by operating which the rail is folded down out of the way or raised so as to guard the edge of the platform.

In the accompanying drawings, Figure 1 is a view of the guard or railing elevated, looking toward the platform. Fig. 2 is a similar view with guard or railing folded down. Fig. 3 is a view of the guard elevated from the platform; and Fig. 4 is an end view of guard and platform.

Similar letters of reference indicate corresponding parts.

Referring to the drawings, A represents the platform.

Two sections, B B′, of the guard or railing are shown attached to the platform. They are composed of bars *a*, pivoted at their lower ends to metal plates *b*, fixed to the edge of the platform, and horizontal bars *c c′*, the former pivoted to angular projections *d* of the bars *a* at their upper free ends, and the latter pivoted to links *d′*, which are in turn pivoted to the bars *a*, so that bars *c′* are suspended about half-way of the height of bars *a*. The object of pivoting the bars *c c′* to projections and links instead of directly to bars *a* is to obtain room or space for one to fall below the other when the railing is folded, as shown in Fig. 2. Here, as will be observed, bar *c′* is permitted by its link to hang below bars *a*, while bar *c* folds partly over bar *a*, which it could not do were it pivoted to the end just above the link. Thus this arrangement of the projections *d* and links *d′* for connecting the horizontal bars *c c′* and bars *a* together permits a closer folding of the railing, and thereby enables it to be turned down below the level of the platform.

A rod, C, is passed through the platform at right angles to the guard or railing, and the end projecting through the front of the platform is fixed to the end of the bar *a* at *e*, and forms the pivot of this bar. The opposite end of rod C is fixed to a crank, *f*, which in turn is pivoted to the pitman *g*, connected with lever D, fulcrumed in the upright E.

By means of the lever and crank rod *c* is oscillated, turning the bar with which it is connected up and down, as may be required, and this movement is communicated to the other bars of the guard or railing, whereby they can be moved from the upright position of Fig. 1 to the folded position of Fig. 2.

Counterbalancing-weights *h* are attached to rods fixed to the bars *a*, so as to facilitate the movement of the guard.

A stop, *i*, is fixed to the plates *b* to limit the movement of bars *a* when lifted up, and when thrown down or folded a hook, *j*, attached to the front of the platform, catches one of the rails or bars and supports the guard.

If the platform is long several sections can be employed, and all operated by one lever or more, if desired. Two sections are shown in the drawings. They are arranged to fold in opposite directions, as shown in Fig. 2, and are operated by the single lever D from the middle or lever D′ at the end, as may be desired. The two sections are constructed precisely alike, but are arranged to fold away from each other, as before mentioned.

The two sections are each provided with a rod, C, a crank, *f*, and pitman *g*, joining the lever D, so that by operating this lever the two are folded down instantly or thrown up, as may be desired. The lever D′ is connected directly through a rod, C′, with one section; but through the cranks, pitman, and lever D the motion is communicated to the next section; but if the guard is to be operated from the end the connection between the sections can be made by a double crank and connecting rods or links.

This invention, it will be seen, furnishes an effectual obstacle to passengers falling from

the platform while waiting thereon the arrival of trains; but at the same time it can be quickly folded away, so as to leave the passage to the cars unobstructed, and this can be accomplished without a moment's delay. This rapidity and facility of raising and lowering makes it especially valuable as a guard for elevated-railway platforms.

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

1. An improved guard for railway-platforms, composed of the bars *a*, pivoted at their lower ends to the front of the platform, and the horizontal bars *c c'*, the former pivoted directly and the latter by the links *d'* to the said bars *a*, which are operated by rod C through the crank and pitman by lever D, in the manner substantially as described.

2. The bars *a*, pivoted at their lower ends to the front of the platform, and having at their free ends projections *d*, in combination with bar *c*, pivoted to projections *d*, and bar *c'*, pivoted to links *d'*, and links *d'*, pivoted to bars *a*, substantially as described.

3. The rods C, fixed at one end to one of the bars *a* at *e*, and at the opposite end provided with a crank, *f*, connected with a lever, D, through pitman *g*, in combination with lever D and the bars *a c c'*, pivoted together, and adapted to fold up out of the way or be raised, so as to furnish a guard or railing for the platform, in the manner substantially as described.

JACOB SIMONSON.

Witnesses:

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