

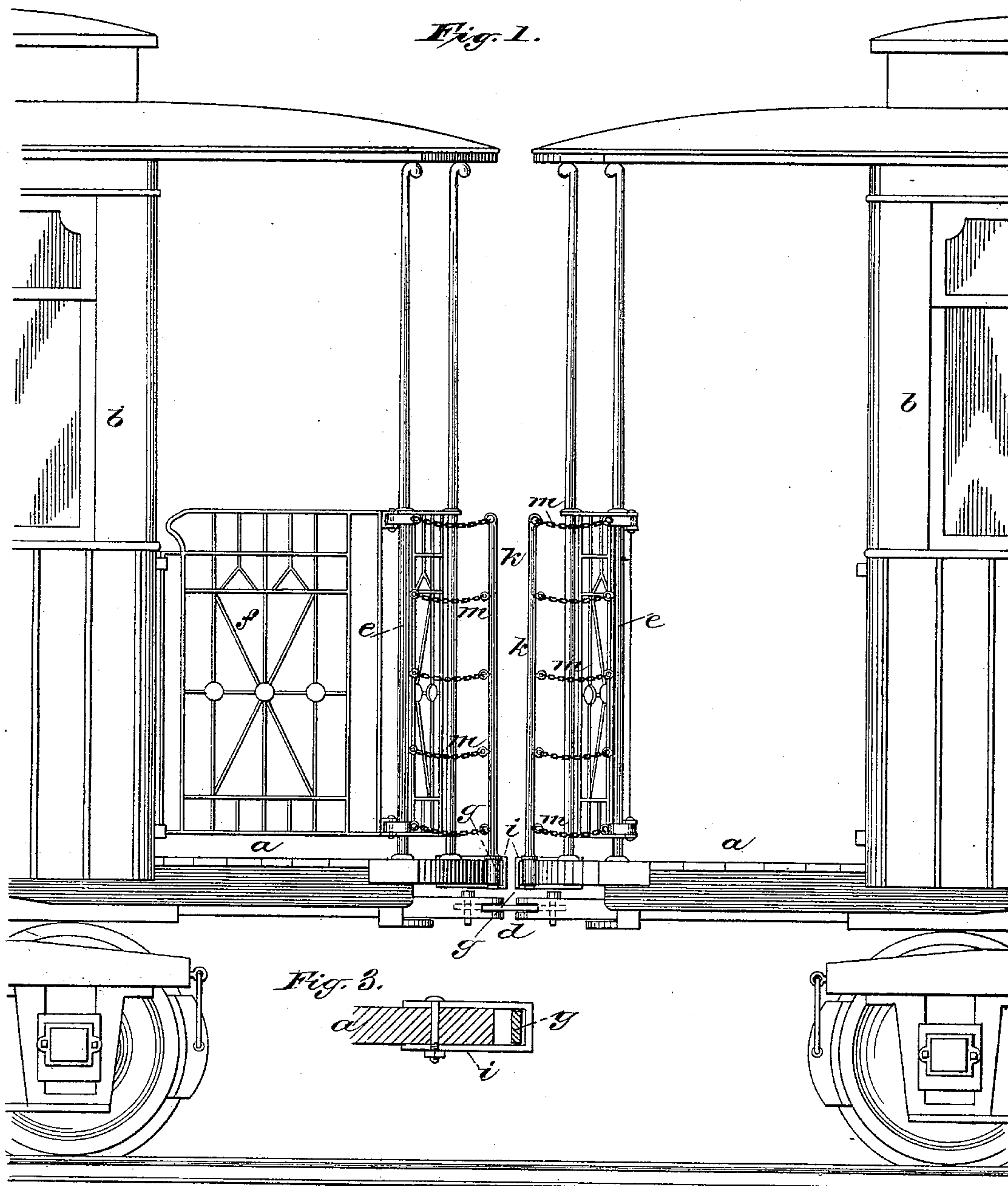
(No Model.)

J. B. DRISCOLE.
GUARD FOR CAR PLATFORMS.

2 Sheets—Sheet 1.

No. 266,786.

Patented Oct. 31, 1882.



Witnesses:
Henry F. Parker.
Geo. E. Savin

Inventor:
John B. Driscoll,
by Chas. M. Higgins
attorney.

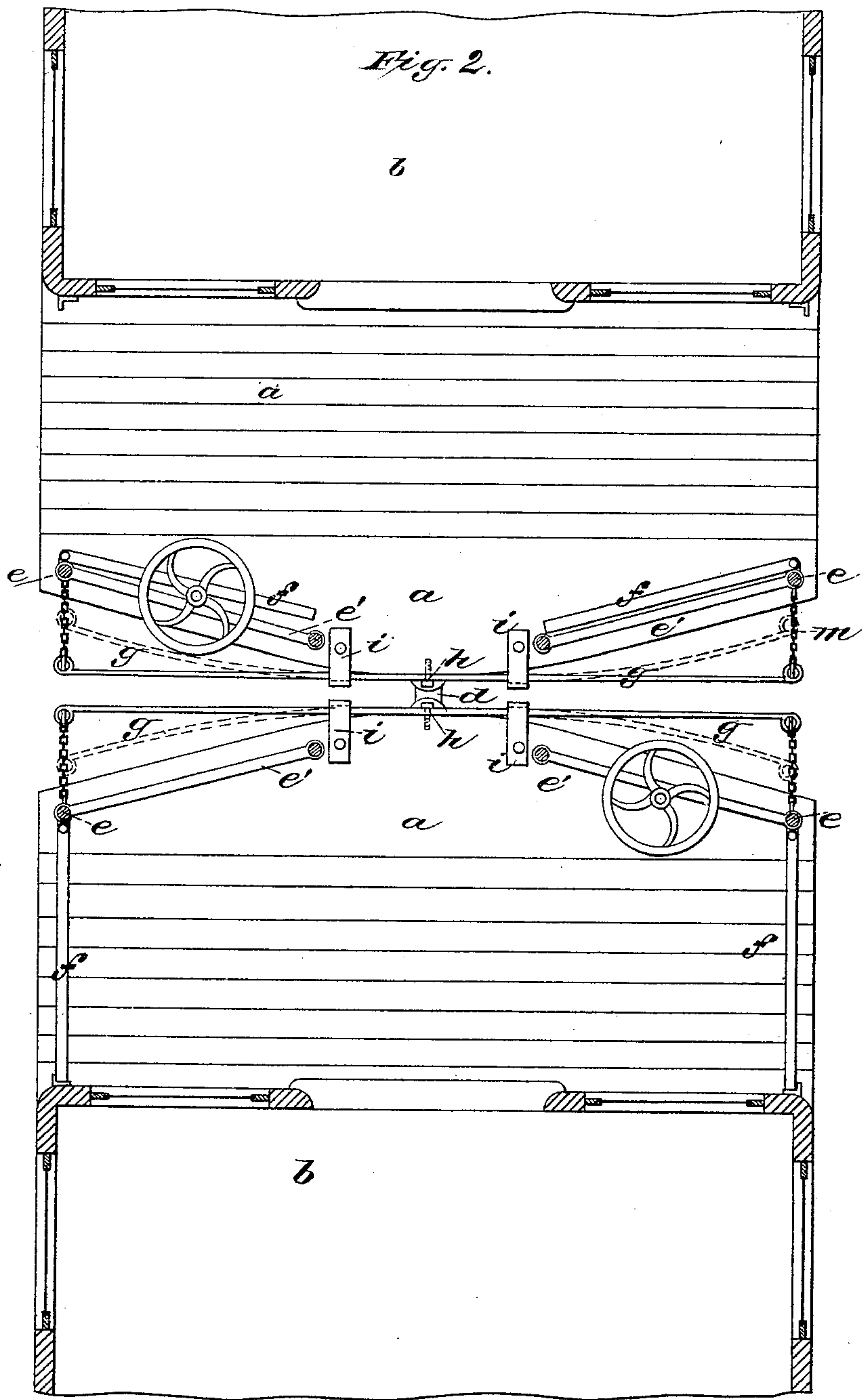
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UNITED STATES PATENT OFFICE.

JOHN B. DRISCOLE, OF NEW YORK, N. Y.

GUARD FOR CAR-PLATFORMS.

SPECIFICATION forming part of Letters Patent No. 266,786, dated October 31, 1882.

Application filed June 23, 1882. (No model.)

To all whom it may concern:

Be it known that I, JOHN B. DRISCOLE, of New York city, in the county of New York and State of New York, have invented certain new and useful Improvements in Guards for the Meeting Ends of Railway-Cars, of which the following is a specification.

My invention applies more especially to the cars of elevated railways, which pass frequently around short curves, which hence causes considerable angular as well as side movement to occur at the ends of the meeting platforms. To allow this angular and side motion between the cars, the platforms are formed with the beveled or tapered ends, so that the platforms approach each other at the center only, where they couple together, while the end corners recede to permit the said motion, and this taper is usually much greater on elevated-railway cars than on other cars, on account of the sharper curves around which the cars pass, as is well known. It therefore follows that when the cars assume a straight line with each other, when run into the station, a side gap or open space will exist between the ends of the cars, due to the receding corners of the tapered platforms, which gap is usually as wide as the gateways on the platforms, and is frequently mistaken by thoughtless persons for the gateways, and thus presents an unguarded opening into which persons are likely to fall and become injured between the cars, several serious accidents having occurred in this way. To prevent this a jointed lattice or lazy-tongs has been sometimes extended across the gap and hinged at each end to the gate-posts on the corners of the opposite platforms.

The object of my invention is to provide an improved guard for this purpose which shall be simple and efficient, and shall possess the important advantage of being complete in itself on the end of each car-platform without requiring connection with the opposite car-platform, so that when the cars are simply coupled together the guards on the ends of the respective platforms will approach and close the gap at all times while the cars are in line, and will yet yield to all the necessary angular and side motions of the cars when in motion.

To this end the main feature of my invention

may be stated to consist in a horizontal bar jointed at its middle to the middle of the platform, and projecting at each end in front of the recessed corners of the platform, with posts arising from said ends and chains, or their equivalent, extending from said posts across the recess or gap to the platform, as hereinafter fully set forth.

In the annexed drawings, Figure 1 presents a side elevation of the meeting ends of two elevated-railway cars provided with my improved side guards. Fig. 2 is a plan thereof, the car-bodies being in section. Fig. 3 illustrates a detail.

In the drawings, *a* indicates the platforms, and *b* the bodies, of the cars. The ends of the platforms are tapered off on each side from the center, as shown, so that the platforms approach each other at the center, where the usual coupling, *b*, couples the two cars together, while the end corners of the platforms recede from each other, and thus leave a wide open space or gap between them, as seen best in Fig. 2, for the purpose of allowing the angular and side motion of the cars in passing around curves, as before noted.

e e' indicate the platform-railings, which rise parallel with the tapered ends of the platforms, being separated, as usual, at the center of the platform to permit passage from car to car.

f f indicate the gates of the platforms, which hinge to the gate-posts *e* of railings *e e'* and swing back against the railings when opened, the gates being shown opened in one car and closed in the other.

According to my invention I affix on the end of the platform a strong bar, *g*, preferably of steel, about four inches wide and one-quarter of an inch thick, which bar is disposed horizontally, as shown best in Fig. 2, parallel with the platform, and extending straight across the end of the same. This bar is fixed at its middle preferably by a single bolt, *h*, to the middle of the platform, and its mid-portion on either side of the bolt *h* passes loosely through metal loops or clips *i*, affixed to the platform, (see Figs. 2 and 3,) while its free ends terminate near the sides of the cars at a distance from the receding corners of the tapered platform, and thus project into about the middle

of the open space or gap between the platforms. Now, from the free ends of the bar *g* a post, *k*, arises about parallel with the gate-post *e*, and chains *m*, or other flexible connections, (shown best in Fig. 1,) are extended at suitable intervals from the guard *k* to the gate-post *e*, thus spanning and closing the gap at the tapered corner of the platform, as will be readily understood from Figs. 1 and 2. It will therefore be seen that when two cars fitted with these guards are coupled to each other, as shown in Figs. 1 and 2, the guards on the ends of the opposite platforms will approach each other, and thus effectually close the gap between the platforms, thereby accomplishing the object of the invention in a certain and simple manner. It may be here noted that each car carries its own portion of the guard as a permanent fixture, hence when the cars are simply coupled together the side gap between the cars becomes at once protected without requiring any additional connection from car to car, as has been the case heretofore.

The bar *g*, as will be readily understood, will be sustained firmly in the position shown and described by means of the central bolt, *h*, and the holding-clips *i*, and it will hence sustain the guard-post *k* in firm upright position, for such a bar made of steel or other metal will have great strength and stability in the required directions, and at the same time will possess a springy or yielding quality to allow the bar and its sustained posts to readily move or yield in a direction across the gap to or from the gate-posts *e*, as will be readily understood. Hence, when the cars assume an angular position in passing around a curve, where the tapered corners of the platforms on the inner side of the curve tend to approach each other and close the gap between them, the bars *g* and posts *k* will approach or come in contact, and the springy or jointed connection of the bars *g* with the middle of the platforms will thus allow both bars to bend or yield readily in whichever direction the bend of the cars tends to force them, so that the bars and posts will thus converge on the inner side of the curve and diverge on the outer side, and thus adapt themselves to the angular position of the cars, yet when the cars again assume a straight line, as they always do when run into the station, the bars *g* and guard-posts *k* will assume their normal positions, as shown in Figs. 1 and 2, and thus effectually close the gap between the platforms, and thus prevent the accidental falling of persons between the cars. It will also be noted that as the guard on one car is independent of the other, hence the bodily side motions of the cars relatively to each other in passing around the curves is freely allowed without interference from the guards, and so also is the pitching or vertical motion at the ends of the platform, so that this simple plan of guards thus allows all the necessary movements of

the cars, yet always guards the dangerous gap at the platforms when the cars are at the stations. The construction is designed to be such that the spring-bars *g* will normally tend to spring into the true transverse right-angled position shown in Fig. 2, and thereby keep the chains *m* taut across the gap, preferably to being slack, as in Fig. 1. Instead, however, of the bars *g* being elastic and fixed at the center of the platforms in the manner of a spring, the bars may be rigid and pivoted or hinged to the center of the platform with springs arranged to keep the rigid bar in its normal position with the same effect as the preferred construction illustrated.

Instead of the chains *m* between the guard-post *k* and gate-post *e*, any other equivalent flexible or yielding connection may be used, and instead of the chains *m* connecting to the gate-posts *e* they may be connected with any other suitable support on the platform.

My improved guards may of course be applied to other cars besides those of elevated railways; but as the need of them is much greater on elevated railways I have described it with particular reference thereto.

I am aware of the device shown in the patent to Conover, of December 20, 1881, where two chafing bars are hinged to each end of the platforms, one bar being hinged at each recessed corner of the platforms and pressed out therefrom by springs, and each bar connected with a hinged or folding gate or railing which extends across the gap or recess between the platforms. This, however, is obviously distinct from my invention, in that I employ a single horizontal bar on the end of each platform, jointed at the middle to the middle of the platform, with posts on its outer ends and chains or similar connections extending across the gap to the platform-railing, which construction is obviously very simple and efficient.

What I claim is—

1. The combination, with a car having its platform formed with receding corners, of a springy or yielding bar, *g*, connected at the center with the middle of the platform, and projecting therefrom outward at opposite ends, with posts *k*, affixed to and rising from the free ends of said bar in advance of the receding corners of the platform, and chains or equivalent connections extending from said post across the gap to a support upon the platform, substantially as herein shown and described.

2. The combination, with the platform of a car, of the arm *g*, holding-bolt *h*, clip or clips *i*, posts *k*, chains *m*, or their equivalent, with the post or support on the platform, arranged and operating substantially as herein shown and described.

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Witnesses:

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