

KATHARINE E. HOLMES.

Improvement in Railway Car Safety Apparatus.

No. 119,766.

Patented Oct. 10, 1871.

Fig 1.

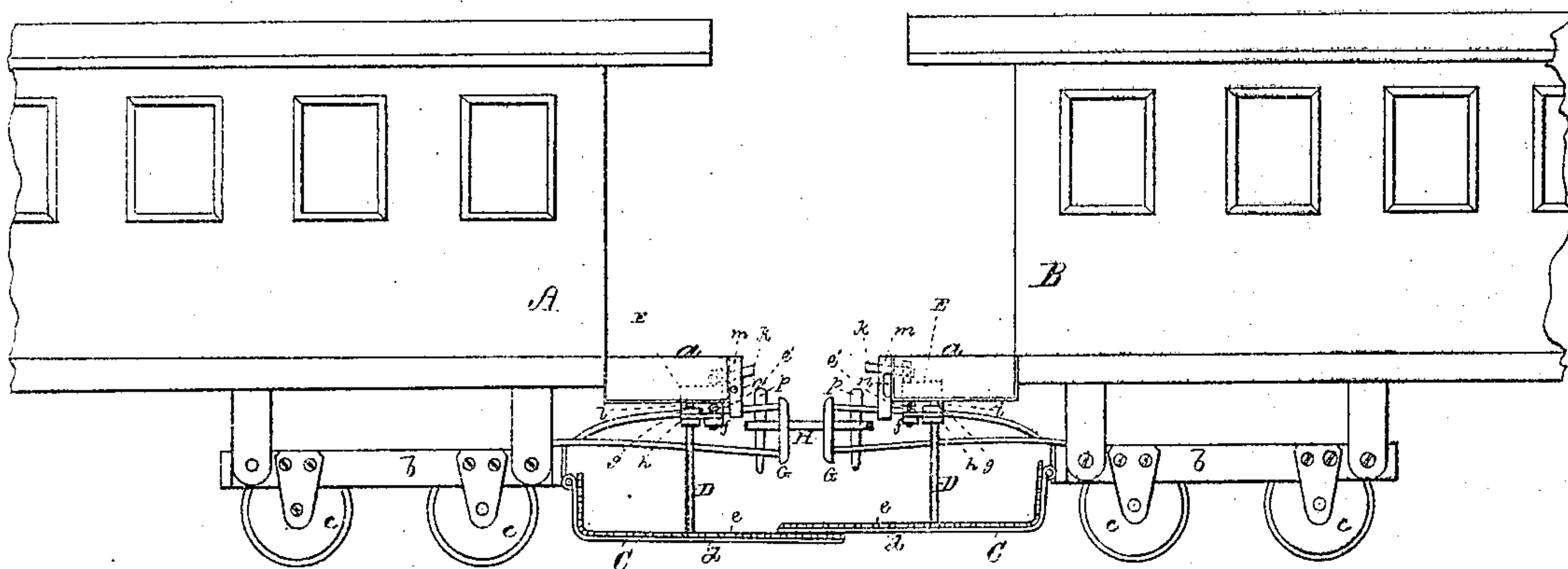
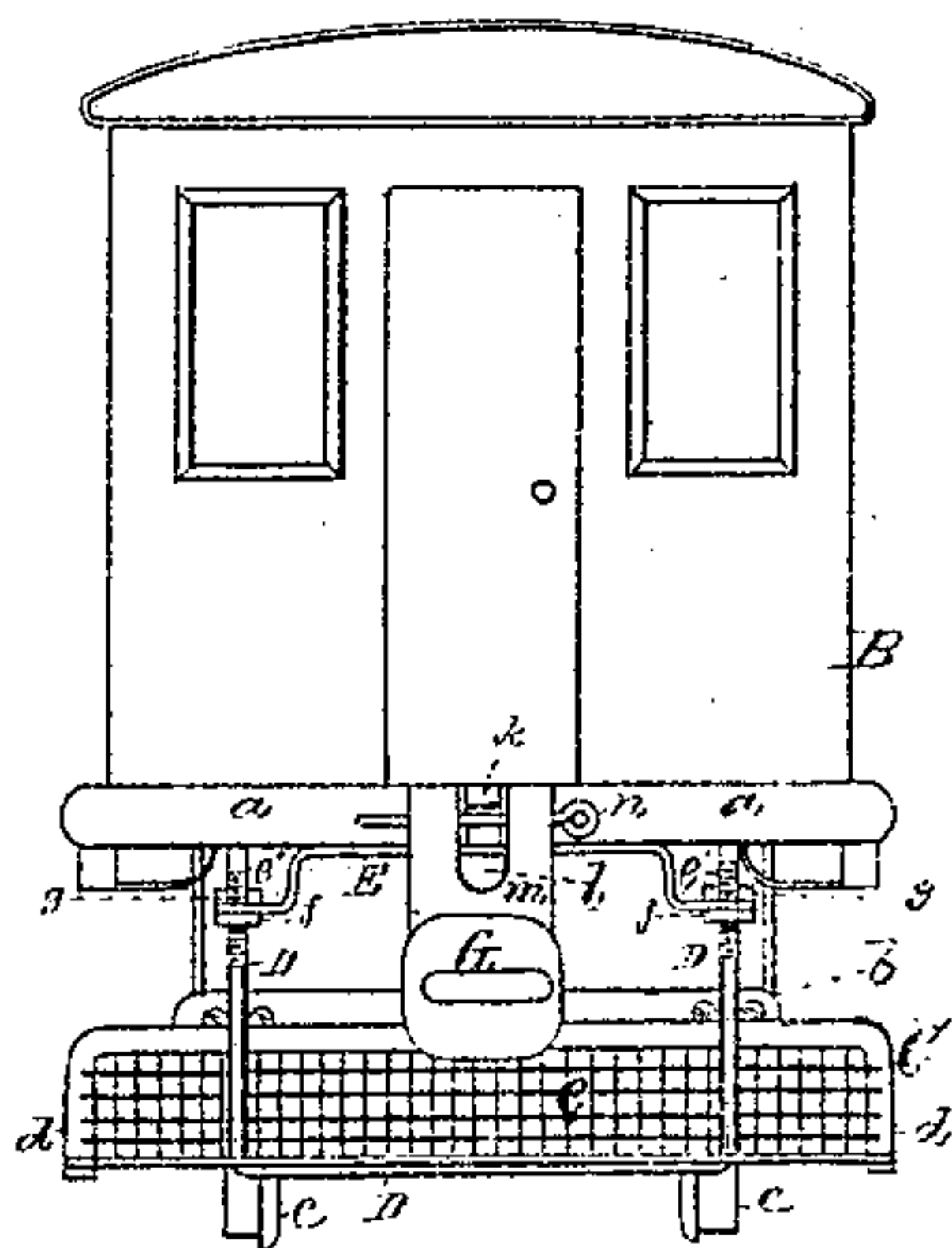


Fig 2.



Witnesses.

S. N. Piper.

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by his attorney

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UNITED STATES PATENT OFFICE.

KATHARINE E. HOLMES, OF CAMBRIDGEPORT, MASSACHUSETTS.

IMPROVEMENT IN RAILWAY-CAR SAFETY APPARATUS.

Specification forming part of Letters Patent No. 119,766, dated October 10, 1871.

To all whom it may concern:

Be it known that I, KATHARINE E. HOLMES, of Cambridgeport, of the county of Middlesex and State of Massachusetts, have invented a new and useful or Improved Safety Apparatus for Railway Carriage; and do hereby declare the same to be fully described in the following specification, and represented in the accompanying drawing, of which—

Figure 1 exhibits a side view of two carriages with it applied to each of them; Fig. 2 is an end view of one of such carriages, each having like mechanism applied to it.

The object of my safety-apparatus is to catch a person while falling between two carriages of a train, and prevent him from being run over by the wheels. The nature of my invention consists mainly in the combination and arrangement of guards of a peculiar kind, as described, and mechanism for adjusting them relatively to each other and the track, all being as hereinafter explained.

In such drawing the carriages are shown at A and B, their end platform being represented at *a a*, and their truck-frames at *b b*. Each truck-frame is to be supposed to be provided with the requisite number of wheels *c c*. To the outer end of each truck-frame there is hinged a right-angular guard, C, composed of a metallic frame, *d*, and wires C, extended across it both widthwise and lengthwise. This guard is further supported by a hanger, D, formed and arranged as shown, and going up through the guard, and also through a lifter-bar, E, which is arranged underneath the platform *a*, and slides vertically on screws *e' e'*, extending down therefrom and provided with nuts *f f*, as shown. The hanger also has screws *i* on its ends where it goes through the lifter-bar, there being nuts *g h* on each of

such screws, one being above and other below the lifter-bar, as shown. From the said lifter-bar a tongue, *k*, extends forward through a slot, *l*, made vertically in plate *m*, fixed to the front of the platform *a*, at its middle. A pin, *n*, goes laterally through the plate and slot, and serves to support the tongue when upon such pin. The purpose of the tongue and pin and slotted plate, is to maintain the guard at an elevation to cause it pass over the next adjacent guard of the next car. The purpose of the hanger and lifter, and their screws and nuts, as described, is to enable the guard to be adjusted to the requisite distance above a track or to the proper height relatively to the guard of another car. The draw-bars of the two cars are shown at G G as connected by a link, H, in the usual manner, the connection-pins being represented at P P.

I claim—

1. The combination of the hanger D provided with adjusting-screws *e' e'* and nuts *f f*, as specified, with the railway carriage and the guard, and applied thereto, as set forth.

2. The arrangement and combination of the slotted plate *m*, and its support-pin *n*, and the lifter-bar E, as described, provided with screws and nuts, as shown, with the carriage A or B, the hanger D and the guard C, applied together, substantially as explained.

3. The combination and arrangement of the two guards C C, as described, and the mechanisms, substantially as described, for adjusting them vertically, as set forth, with the two railway carriages A B, connected as explained.

K. E. HOLMES.

Witnesses:

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J. R. SNOW.

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