(No Model.)

S. H. CALDWELL & R. QUATERMASS.

SAFETY PLATFORM FOR CARS.

No. 356,920. Patented Feb. 1, 1887.

Fig. 6.

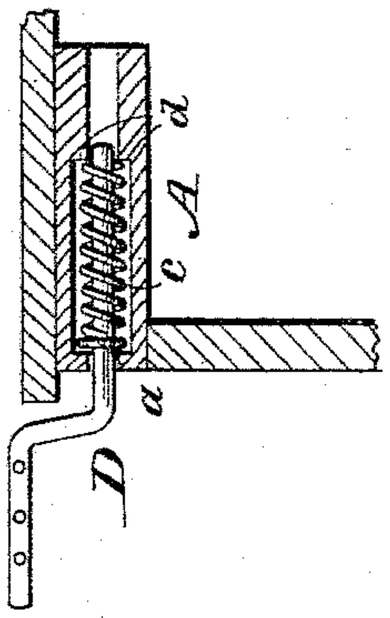


Fig. 5.

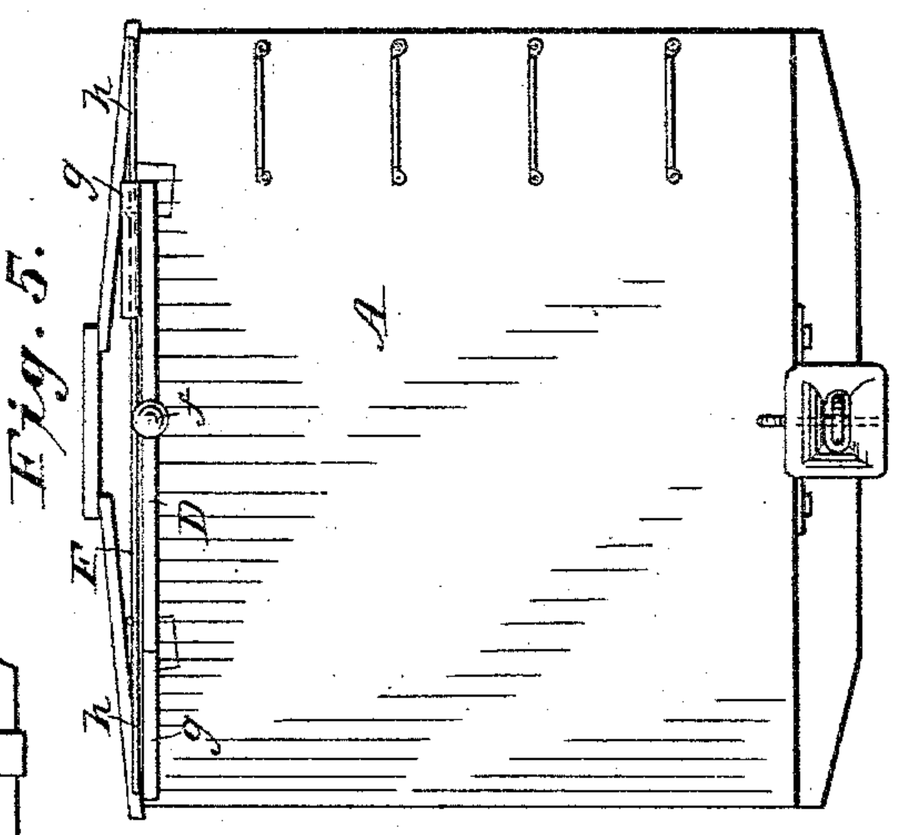


Fig. 2.

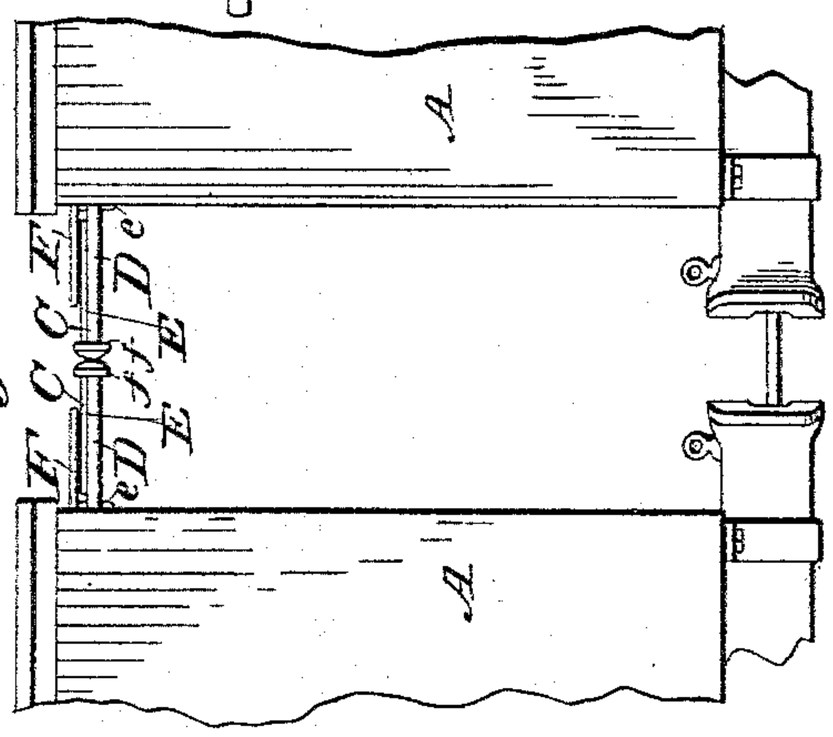


Fig. 4.

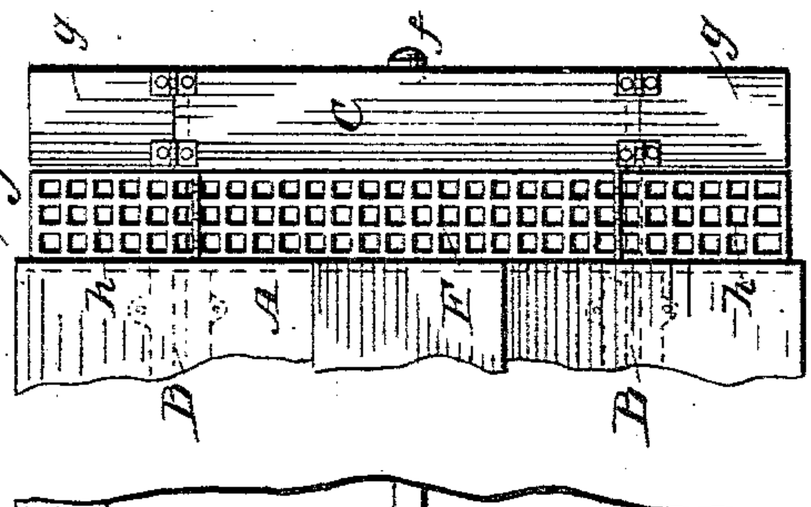


Fig. 1.

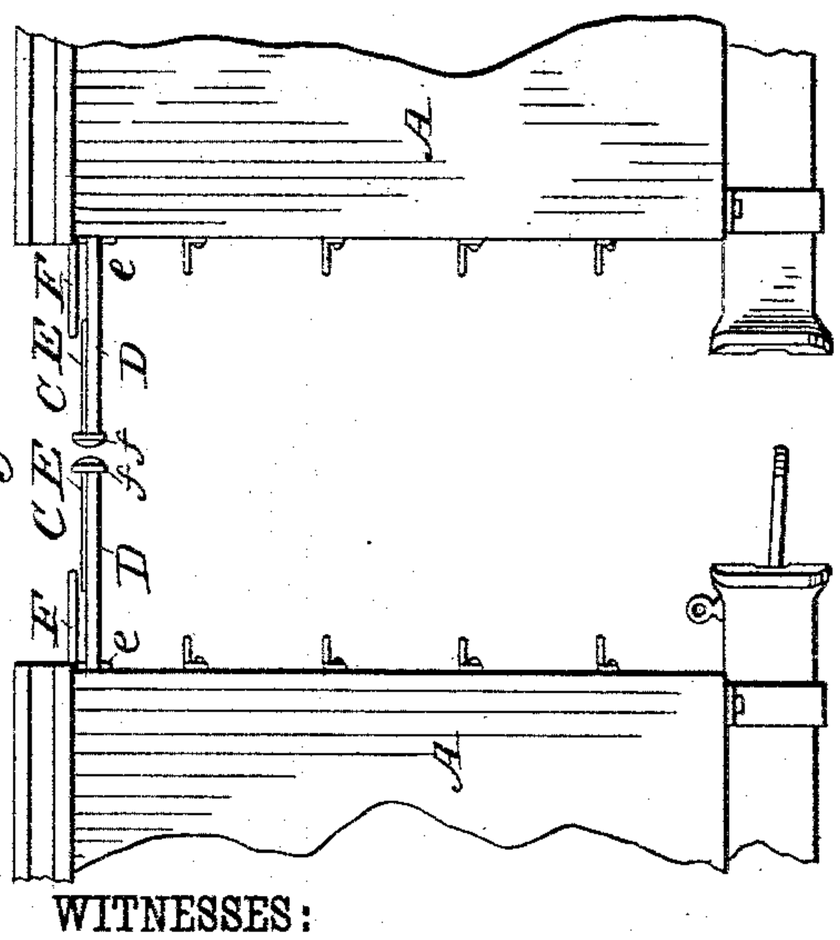
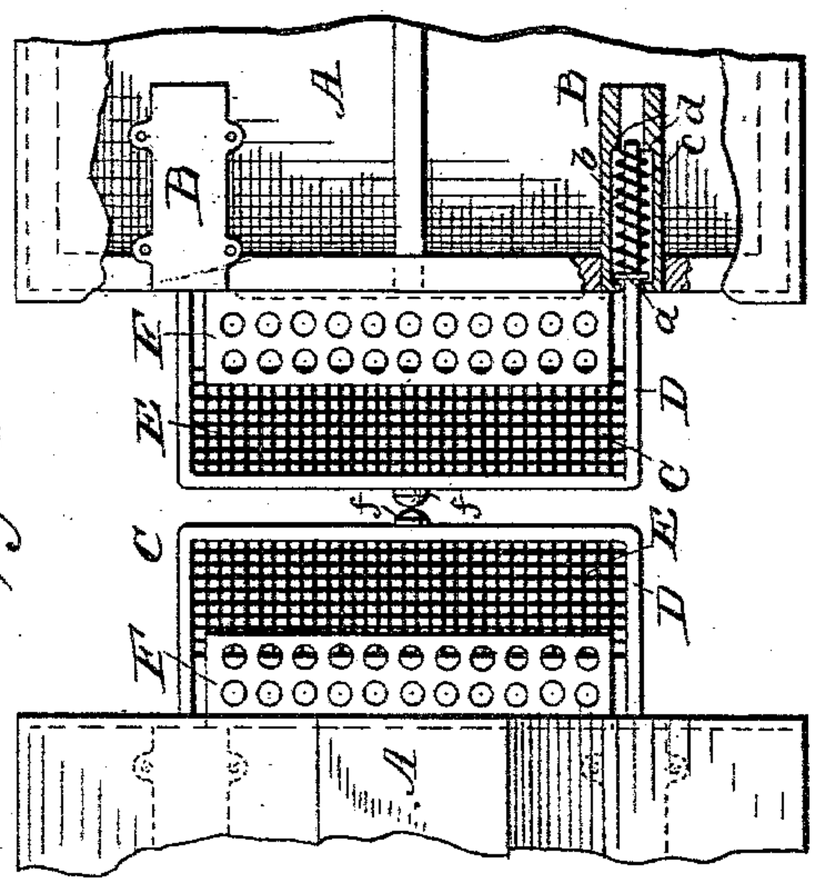


Fig. 3.



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UNITED STATES PATENT OFFICE.

SKILLMAN H. CALDWELL AND REUBEN QUATERMASS, OF MOLINE, KANSAS.

SAFETY-PLATFORM FOR CARS.

SPECIFICATION forming part of Letters Patent No. 356,920, dated February 1, 1887.

Application filed November 17, 1886. Serial No. 219,153. (No model.)

To all whom it may concern:

Be it known that we, SKILLMAN H. CALDWELL and REUBEN QUATERMASS, both of Moline, in the county of Elk and State of Kansas, have invented a new and Improved Safety-Platform for Cars, of which the following is a specification, reference being had to the annexed drawings, forming a part thereof, in which—

Figure 1 is a side elevation of the ends of two cars, showing the position of the safety-platforms before the cars are coupled. Fig. 2 is a side elevation of the ends of two cars, showing the position of the platforms when the cars are coupled. Fig. 3 is a plan view, partly in section, of one form of our improved platform. Fig. 4 is a plan view of another form. Fig. 5 is an end elevation of a car to which our improvement has been applied, and Fig. 6 shows a modified form of the platform support.

Similar letters of reference indicate corresponding parts in all the views.

The object of our invention is to provide for freight and other cars a platform at the ends thereof near the top, for forming a continuous walk for the brakemen, so that they may pass from one car to another without danger of falling between the cars.

Our invention consists of the combinations of parts, including the construction thereof, substantially as hereinafter set forth, and pointed out in the claims.

In the end of the car A are supported sockets B, by bolts or other suitable fastenings extending into the roof of the car. The support of the platform C consists of an iron bar, D, bent twice at right angles in a horizontal plane, with its ends entering the longitudinal holes of the sockets B. Each arm of the bar D is provided with a collar, *a*, and surrounding the bar D in the chambered portion *b* of the socket there is a spring, *c*, which abuts against the shoulder *d*, formed by chambering the socket, and presses against the collar *a*. Upon the support thus made is secured a perforated grating, E, forming the body of the movable platform.

To the end of the car is secured a perforated plate, F, having one edge bent outwardly at right angles, forming a flange, *e*, which is secured to the end of the car by screws or bolts. The plate F overlaps the platform C, so that the said platform may be moved inwardly underneath the plate F.

To the outer edge of the frame formed of the bar D is secured a buffer, *f*, which is designed to contact with a similar buffer carried by a similar platform upon the adjacent car, so that when two cars meet and are coupled, as shown in Fig. 2, the said frames and their gratings E will be pushed inward against the pressure of the springs *c*. Arranged in this way the platforms will adjust themselves to the space between adjacent cars, and will always close the said space, so as to furnish a continuous walk for the brakemen.

The platform may be made narrow, as shown in Fig. 3, to permit of climbing to the tops of the cars at the edges of the platform; or it may be provided with a narrow central part, like that already described. To opposite edges of the platform C will be hinged extensions *g*, and to the perforated plate F will be hinged extensions *h*. Normally the extensions *g h* will be let down into the plane of the platform C and plate F, thus making the platform the full width of the car; and when it is desired to climb to the top of the car these extensions may be folded over onto the parts to which they are hinged.

When the platform is applied to a car which is not of standard height, or when it is applied to cars designed to run with cars higher or lower than standard height, the bar D, which supports the platform, will be offset, so as to raise or lower the platform according to the requirements of the car.

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

1. The combination, with the fixed plate F, secured to the car at the top, of the spring-pressed platform C, adapted to slide under the fixed plate, substantially as described.

2. The combination of the platform C, the supporting-frame formed of the bar D bent twice at right angles, the sockets B, the springs

c, and the plate F, projecting from the end of the car over the movable platform C, substantially as described.

3. The combination of the platform C, the supporting-frame formed of the bar D bent twice at right angles, the sockets B, the springs *c*, the plate F, projecting from the end of the car over the movable platform C, and the buffer *f*, substantially as described.

4. The combination, with the platform F, of the folding parts *g h*, substantially as described.

SKILLMAN H. CALDWELL.
REUBEN QUATERMASS.

Witnesses:
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