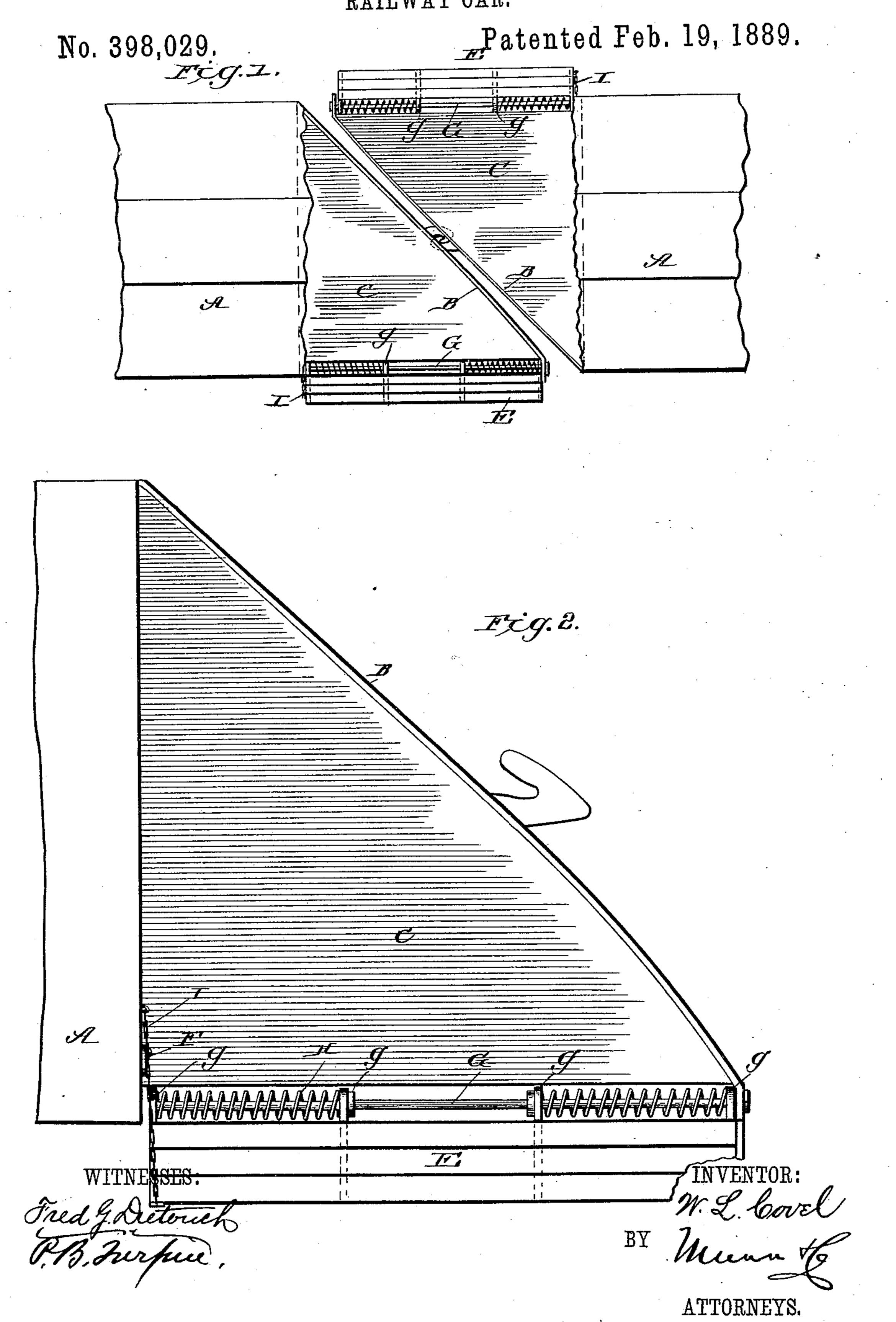
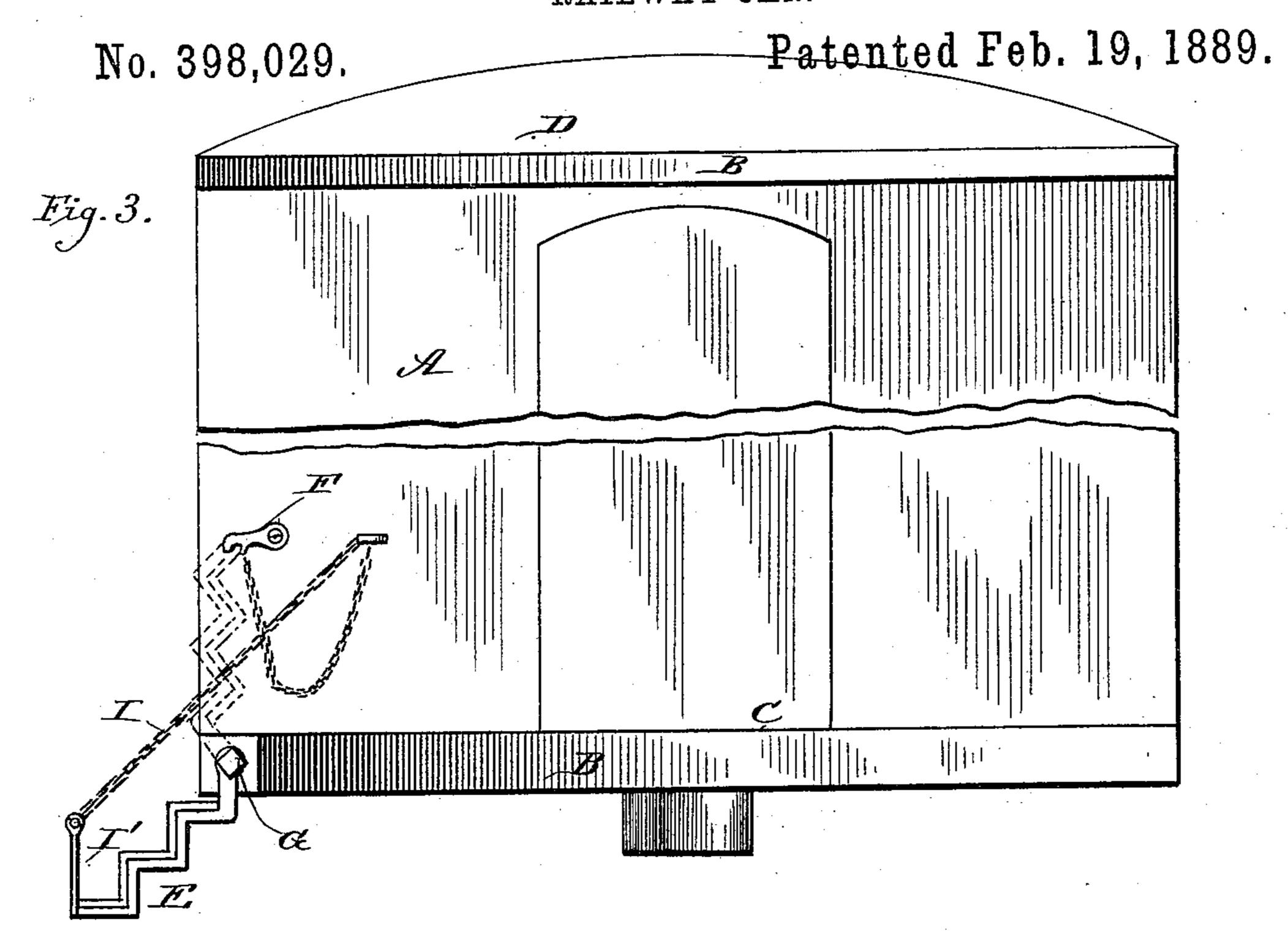
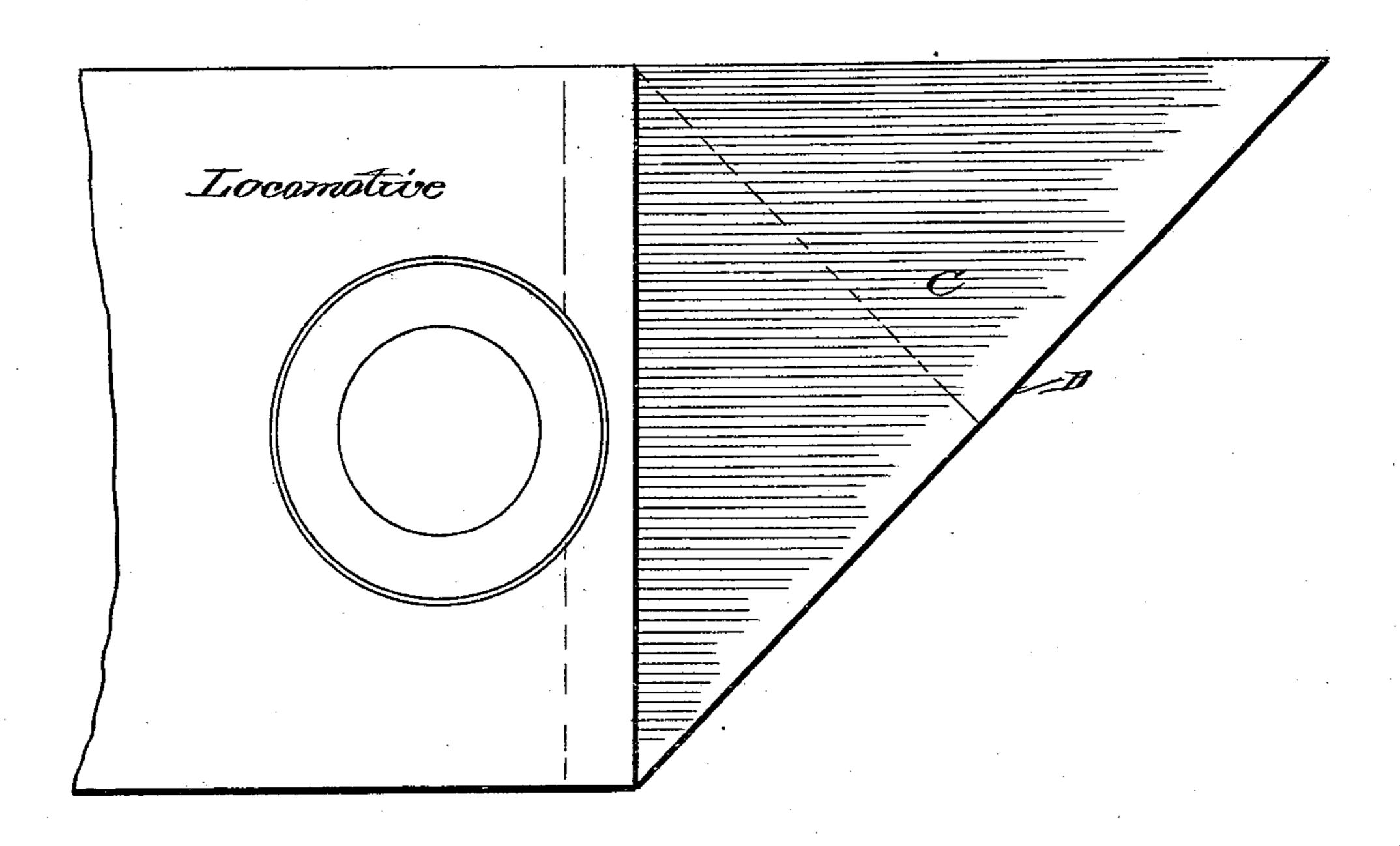
W. L. COVEL.
RAILWAY CAR.



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BY Manu ATTORNEYS.

## United States Patent Office.

WILLIAM LANDON COVEL, OF BILOXI, MISSISSIPPI.

## RAILWAY-CAR.

SPECIFICATION forming part of Letters Patent No. 398,029, dated February 19, 1889.

Application filed September 17, 1888. Serial No. 285,662. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM LANDON COVEL, of Biloxi, Harrison county, State of Mississippi, have invented a new and Improved Railroad-Car, of which the following is a specification.

My invention is an improvement in rail-way-cars, in which general term the locomotive may be considered as included; and the invention consists in certain novel constructions and combinations of parts, as will be hereinafter described and claimed.

In the drawings, Figure 1 is a top plan view of the end portions of two coupled cars constructed according to my improvement, the overhanging roofs of said cars being broken away. Fig. 2 is a similar view, enlarged, of one of the cars. Fig. 3 is an end view of a car, the steps being lowered in full lines and elevated in dotted lines; and Fig. 4 shows the improvement on a locomotive.

The cars A, except in the particulars hereinafter specified, may be of ordinary construction and may be coupled in any suitable 25 manner.

At their ends the cars are provided or formed with surfaces or bearings B, inclined to the direction of motion and extended from side to side of the car. In the construction shown this surface or bearing is formed on the front edge of the platform C, which latter is thereby made triangular in shape. I also form the edge of the roof D at an angle corresponding to surface or bearings B and in line therewith.

At the wide side of the platform I hinge the upper edge of the steps E, so that such steps may be turned up to form a guard at the side of the platform or down for use as steps, a 40 fastening, F, being provided to secure the step elevated, such fastening being in the construction shown a hook pivoted at one end to the car and adapted at its opposite end to engage the free end of the step when the latter is turned up, as shown in dotted lines, Fig. 3.

In hinging the steps a rod, G, is fixed along the wide side of the platform, and the steps are provided with eyes g, turning on such rod, providing a strong simple construction of hinge and also a convenient support for the spring H, which is coiled on rod G, secured at one end to the platform and at its opposite

end to the steps, as shown, so that the said spring will assist in elevating the steps.

In order that the steps may be conveniently 55 lifted from the platform, I provide a chain, I, secured at one end to an arm, I', which is fixed to the steps at the lower end of the same, such chain being extended up and secured to the car in convenient reach from the platform, so 60 that the steps may be easily pulled up by one on the platform. I also propose to provide the locomotive, which may be included in the term "cars," with an inclined surface or bearing, as will be understood from Fig. 4.

It will be seen that my invention seeks to provide means by which two locomotives meeting will be directed off to opposite sides, instead of contacting forcibly end to end, and by which the cars of the train in case of collision will be prevented from telescoping by being deflected off to one side, the inclines at the meeting ends of the adjoining cars serving to direct the cars alongside of each other, as will be readily understood, thus 75 avoiding the great loss of life and damage to property incident to the telescoping of cars in case of accident.

An important advantage results from extending the angular edge of the platform from side to side, as by reason of such construction the angular faces practically abut, and in the forcing together of the cars the angular faces of the meeting platforms, being close together and coinciding from side to side, insure the proper deflection of the cars and prevent telescoping in even the smallest degree; also, by extending the angular edge from side to side the single guard or rail at the wide side of each of two meeting platforms is all that is 90 required, as will be readily understood from Fig. 1.

What I claim is—

1. A car or locomotive having at its end a three-sided platform made at its base or side 95 next the car-body of the full width of such body, having one side formed in line with the side of such body, and its other side or edge inclined to the direction of motion and extended from side to side the full width of the 100 car, substantially as set forth.

2. A car having a triangular platform and provided at the wide side thereof with steps adjustably connected with such platform,

whereby they may be turned down for use as steps or up to serve as a guard-rail for the

platform, substantially as set forth.

3. A car-platform combined with steps hinged to the side thereof, whereby they may be turned up or down at will, a spring engaging said steps and adapted to assist in elevating the same, and a fastening whereby the steps may be secured in elevated position, substantially as set forth.

4. A car having its end platform and the roof overhanging the same formed with surfaces or bearings at an angle inclined to the direction of motion, substantially as set forth.

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5. The car having at its end a platform and 15 an overhanging roof formed with angles inclined to the direction of motion, steps hinged to the wide side edge of the platform, whereby it may be turned up or down, the spring for assisting in elevating the steps, and a fastening for securing the steps elevated, all substantially as and for the purposes specified.

WILLIAM LANDON COVEL.

Witnesses:
FRANK S. HUBBARD,
BURR SPENCER.