(No Model.)

H. COCHRAN.

GATE FOR CAR PLATFORMS.

No. 472,727. Patented Apr. 12, 1892.

FIG. 1.

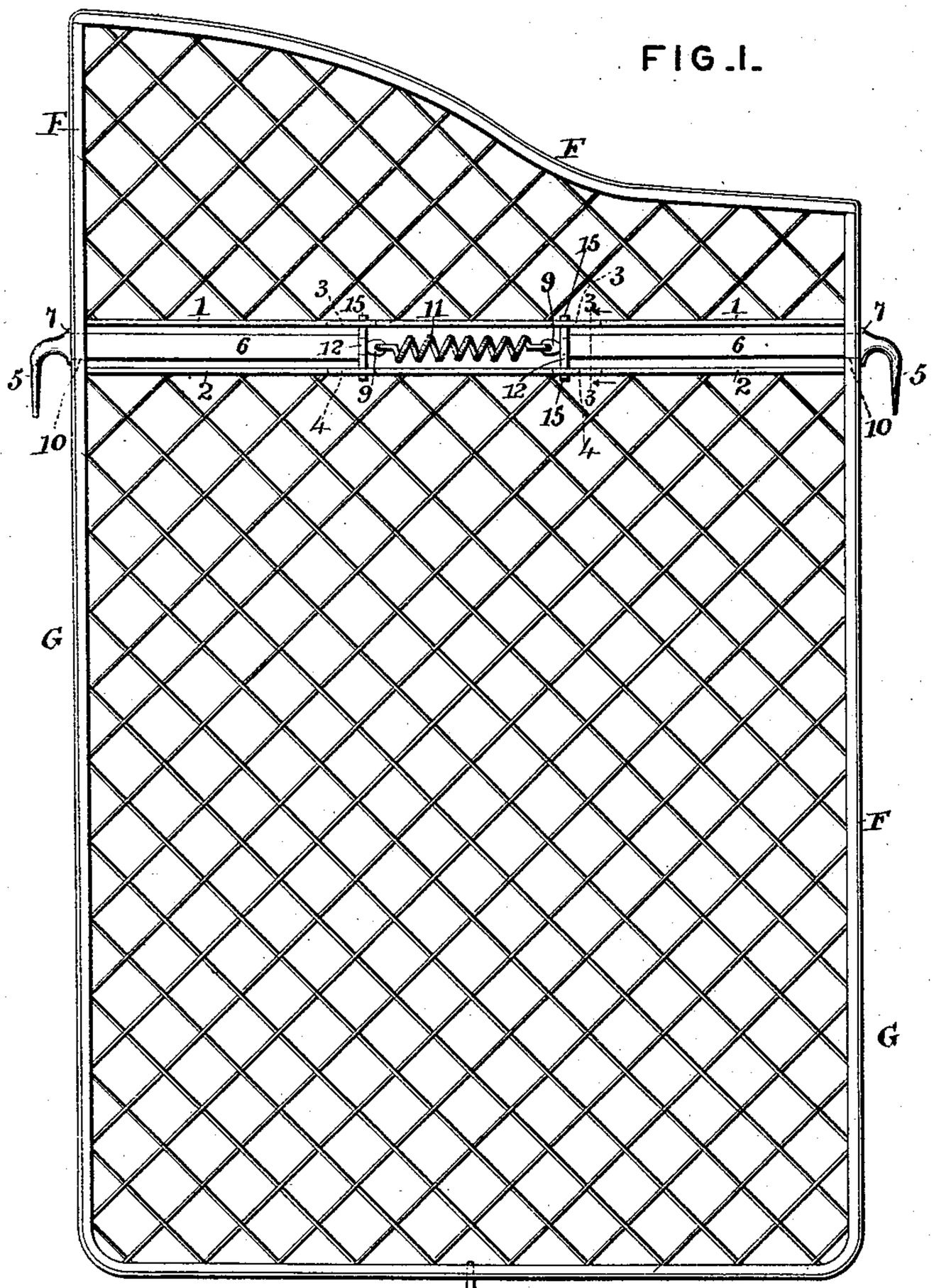


FIG. 3.

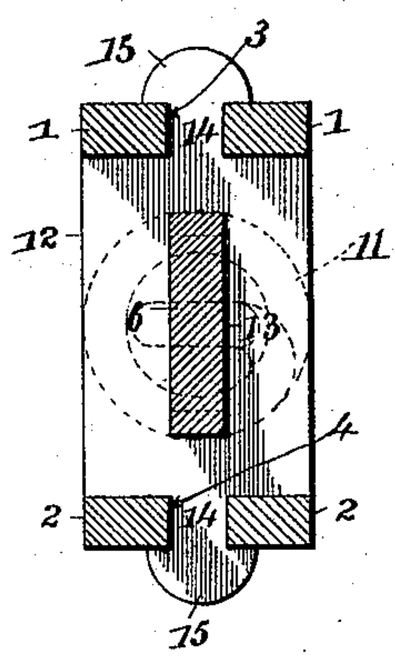
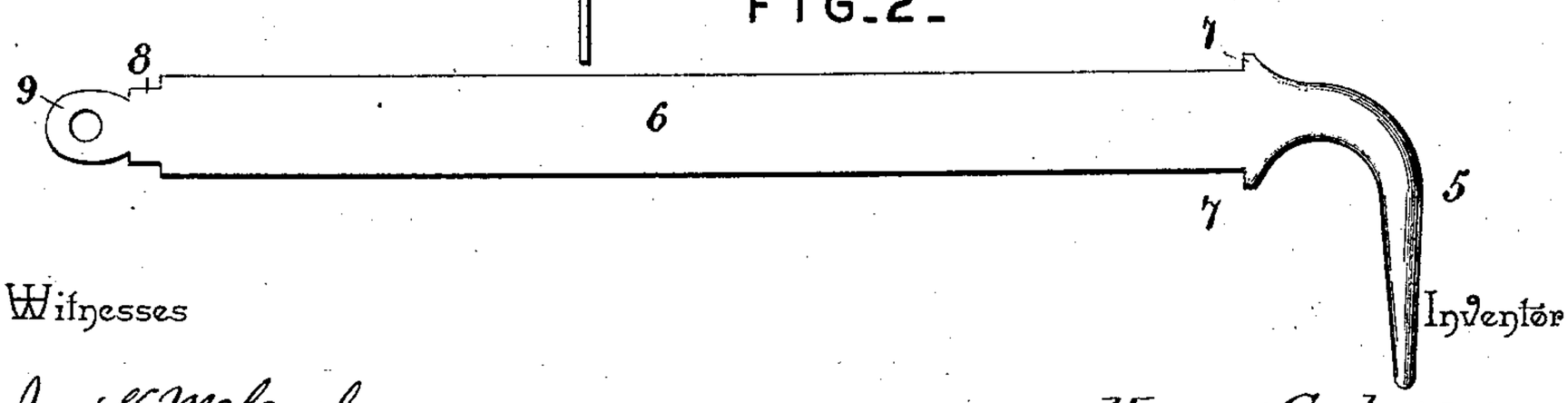


FIG. 2.



Witnesses

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UNITED STATES PATENT OFFICE.

HENRY COCHRAN, OF CHESTER, PENNSYLVANIA.

GATE FOR CAR-PLATFORMS.

SPECIFICATION forming part of Letters Patent No. 472,727, dated April 12, 1892.

Application filed December 26, 1891. Serial No. 416,239. (No model.)

To all whom it may concern:

Be it known that I, HENRY COCHRAN, a citizen of the United States, residing at Chester, in the county of Delaware and State of Pennsylvania, have invented a new and useful Gate for Car-Platforms, of which the following is a specification.

This invention relates to railway-cars such as are usually used on street-railroads or in cities, and more especially to the gates detachably mounted on the platforms thereof; and the object of the same is to produce an improved means for connecting and supporting such gates.

It is well known by those familiar with street-railway travel that the gates which are now commonly employed on the front platform and sometimes next the adjacent track of the rear platform to prevent passengers getting off or on the car at such points are subjected to much strain, owing to the fact that passengers will sit upon or lean against them, especially if the car is crowded. At its inner edge each gate is connected to an eye in the end of the car; but at its outer edge it must of course be attached to the dash-board, which is usually of sheet-iron suitably braced, yet not very strong, because it is never subjected to much strain. Again, when car-platforms settle, as they sometimes do slightly, the dash-board is drawn away from the car-body somewhat and the hooks on the gate will no longer reach the eyes, or if the hooks are seated in deep sockets on the car-body and dash-board such canting of the latter will break one or both of the hooks. At all times the weight of a passenger on the gate is liable to break the hooks, because the latter cannot yield in any direction.

The object of the present invention is to overcome these objections by providing a support for the gate which will not break and which will yield slightly, as may be required; and to this end the invention consists in the construction hereinafter more fully described and claimed, and substantially as illustrated on the accompanying sheet of drawings, wherein—

Figure 1 is an elevation of the gate complete. Fig. 2 is an enlarged elevation of one of the hooks complete. Fig. 3 is a cross-section on the line 3 3 of Fig. 1 and on a still further enlarged scale.

Referring to the said drawings, the letter G designates the gate, which in the present instance comprises a frame F of metallic bands and a suitable body of wire-netting, and P is a pin at the lower end of the gate adapted to enter a hole or socket preferably formed in the step of the car-platform.

No novelty is claimed for the gate, and its construction may be varied at will.

Coming now to the present invention, 1 and 2 are horizontal cross-bars having aligned slots 3 and 4 about where shown in Fig. 1.

5 5 are hooks of duplicate construction, the body 6 of each hook being rectangular, with an enlarged shoulder 7 adjacent the hook proper, a reduced shank 8 at its other end, and beyond said shank an eye 9. The bodies of the hooks are passed in through apertures 10 in the sides of the frame and extend between the two cross-bars 1 and 2, as shown, the eyes 9 being connected by a strong spiral spring 11.

12 12 are duplicate guide-plates, each having a hole 13 through its center of a size to fit on the shank 8. Each plate is of a length to slide between the adjacent faces of the cross-bars, and at its upper and lower ends it has extensions 14 passing through the slots in the cross-bars and enlarged or headed, as at 15, above and below said bars, as best seen in Fig. 3.

A gate of this construction can be applied to the platform of a car in the usual manner, the hooks 5 entering eyes or sockets on the end of the car-body and on the dash-board and the pin P entering a hole in the step, as will be readily understood. If now the platform settles or the dash-board through any means is drawn temporarily or permanently away from the car-body, obviously the spring 11 will yield and the shanks or bodies of the hooks will slide through the apertures in the frame, while the extensions of the guides will move in the slots in the cross-bars. Furthermore, as the entire gate is to a certain extent flexible, when a passenger leans against the same and bears it out of a true plane the hooks proper will move apart, as above de-

scribed. By reason of the fact that the body of each hook has two firm bearings, one in the frame and the other where the guide-plates move between the cross-bars whenever a passenger sits upon the gate, so that the tendency thereof would be to bend down between the hooks, the latter will firmly resist.

I make no mention of the sizes, materials, and exact shapes of parts, as those are matters with which the manufacturer should deal rather than the inventor.

What is claimed as new is—

1. A gate for car-platforms, comprising a frame, cross-bars between the sides thereof, and a body, combined with hooks having straight bodies sliding through apertures in the frame and moving between the cross-bars, shoulders near the outer ends of the bodies and standing outside the frame, eyes at the inner ends of said bodies, and a contractile spring connecting the eyes, all as and for the purpose set forth.

2. A gate for car-platforms, comprising a frame, two cross-bars within the frame and provided with vertically-aligned slots, and a body also within the frame, combined with hooks having straight bodies sliding in apertures in the frame and moving between the cross-bars, said bodies having reduced shanks and eyes at their inner ends, a contractile spring connecting said eyes, and a guide-plate mounted on each shank with its ends sliding in the slots of the cross-bars, all as and for the purpose set forth.

3. A gate for car-platforms, comprising a frame, cross-bars within the frame and arranged in a pair having two slots in its length, and a body also within the frame, combined with hooks having straight rectangular bodies sliding in apertures in the frame and moving between said bars, shoulders near the outer ends of said bodies and standing outside the frame, reduced shanks and eyes at the inner ends of said bodies, a contractile spring connecting said eyes, and a guide-plate having a hole through its body and mounted on each shank, the ends of the plate sliding between the adjacent faces of the cross-bars and having extensions moving in the slots thereof and with headed outer ends, all as and for the purpose hereinbefore set forth.

4. A gate for car-platforms, comprising a frame, hooks at each side thereof and sliding in ways provided on the frame, and a spring connecting the inner ends of the hooks, substantially as described.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in the presence of two witnesses.

HENRY COCHRAN.

Witnesses:
H. R. CRESSMAN,
W. I. SCHAFFER.