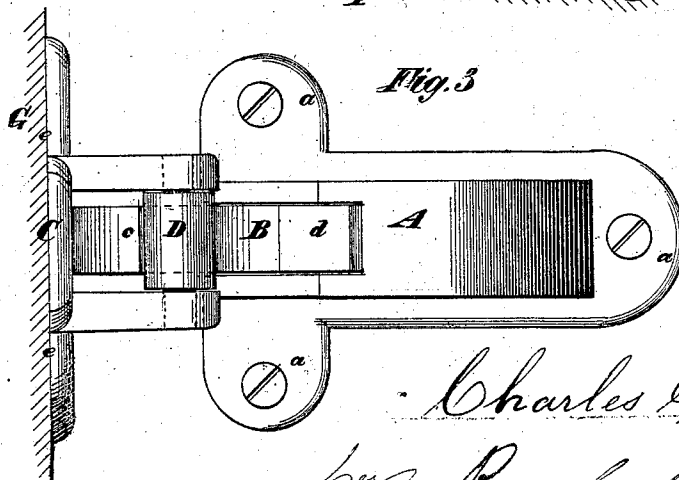
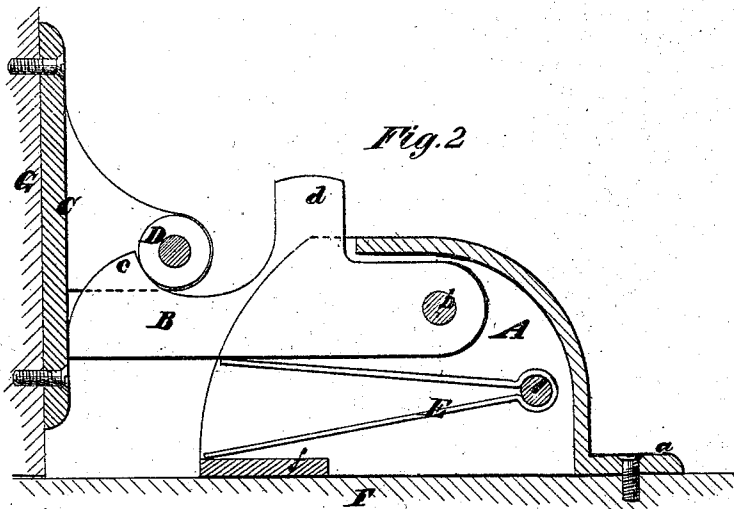
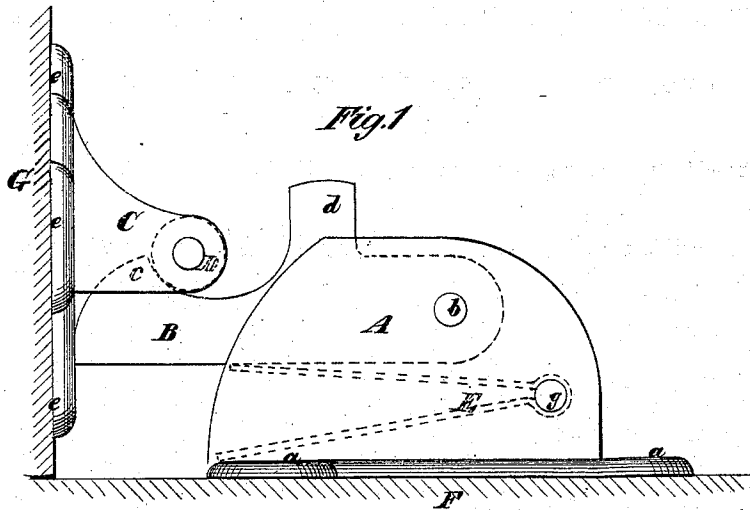


C. GRAHAM.
Improvement in Door-Catches for Railroad Cars.
No. 125,808. Patented April 16, 1872.



Witnesses:
Wm. H. Turner
R. R. Kabeau.

Charles Graham
per R. R. Kabeau
Attorneys

UNITED STATES PATENT OFFICE.

CHARLES GRAHAM, OF KINGSTON, PENNSYLVANIA.

IMPROVEMENT IN DOOR-CATCHES FOR RAILROAD CARS.

Specification forming part of Letters Patent No. 125,808, dated April 16, 1872.

Specification describing an improved Door-Catch for Railroad Cars, invented by CHARLES GRAHAM, of Kingston, in the county of Luzerne and State of Pennsylvania.

This invention consists in the combination of a hook-ended lever-like catch pivoted within a shell, which is to be secured to the floor of the car and is actuated by a spring; with a roller supported in a suitable bearing-piece, which is to be secured to the lower part of the door, whereby a very cheap and effective catch is produced which is automatic in its operation.

In the accompanying drawing, Figure 1 is a side view of the door-catch, showing it applied. Fig. 2 is a central longitudinal section of the same; and Fig. 3 is a plan thereof.

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

A is a case or shell, within which the catch D is secured. This shell is open at its one end and adjacent portion of its top, and also at the bottom, with the exception of a strap or cross-piece, *f*, and is provided with lugs *a a*, by means of screws, passing through which the shell is secured to the floor F of the car, behind the door G, in such position that the door, when opened, shall come in contact with the catch B. The catch is pivoted into this shell by a pin or pivot, *b*, so that its forward end projects through the open end of the shell, which is presented toward the open door. The under side of this catch is or may be straight throughout its length, but on the upper side of its projecting end there is a hook, *c*, some distance in rear of which there is a projection, *d*. E is a spring, bent double and secured in place by a pin, *g*. One end rests on the strap or cross-piece *f* in the shell and the other bears

against the forward portion of the bolt B. O is a frame or bearing-piece, in which a roller, D, is supported. It is provided with lugs *e e*, which are secured by means of screws to the lower portion of the door, in such position relatively to the catch B that the hook *c* may hook under it. The hook is so formed, as shown in Figs. 1 and 2, that its point will not lap the roller D above the center, and hence that it will never make an absolutely positive catch, but will slip from under the roller when force enough is applied to the door to overcome the effect of upward pressure of the spring.

This door-catch is entirely automatic in its operation, for, as the door swings open, the roller comes in contact with the rounded latch-like end of the hook, and pressing against it forces it down, and as soon as the roller passes the point of the hook *c* the catch is sprung up by the spring E, and the hook holds the roller and prevents the door from shutting. To shut the door it is only necessary to pull the door forcibly, and the roller, bearing against the back of the hook, forces the bolt down so that the roller can pass over the hook, and the door is then free to shut.

Claim.

The combination of the hook-ended lever-like catch B, arranged within the shell A and actuated by a spring, E, with the roller D, supported in the frame C, substantially as and for the purpose herein set forth.

CHAS. GRAHAM.

Witnesses:

W. H. SQUAREY,
R. A. HUTCHISON.