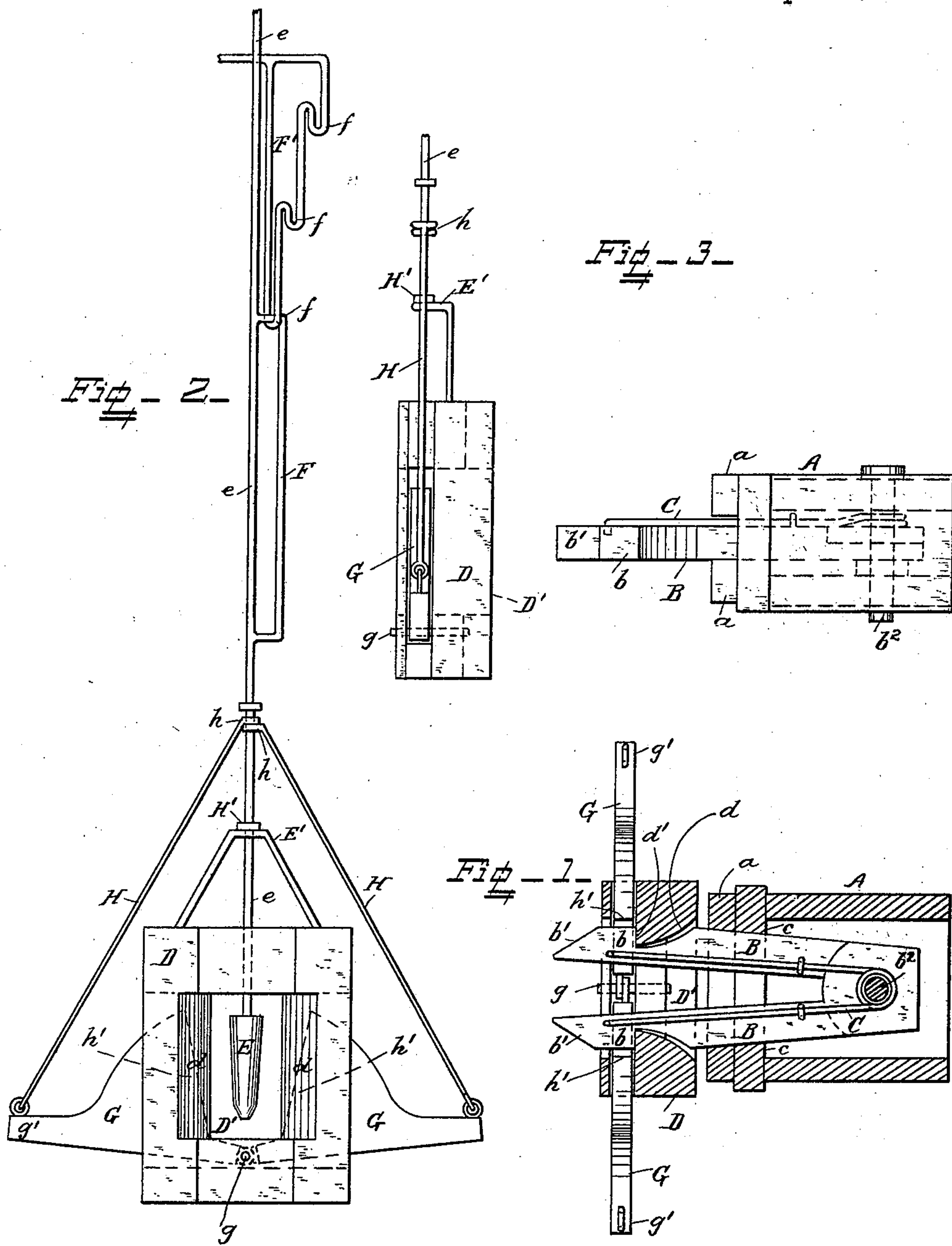


(No Model.)

G. W. WALLINGFORD.
CAR COUPLING.

No. 435,956.

Patented Sept. 9, 1890.



WITNESSES

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UNITED STATES PATENT OFFICE.

GEORGE W. WALLINGFORD, OF MOUNT GILEAD, KENTUCKY.

CAR-COUPLING.

SPECIFICATION forming part of Letters Patent No. 435,956, dated September 9, 1890.

Application filed March 6, 1890. Serial No. 342,891. (No model.)

To all whom it may concern:

Be it known that I, GEORGE W. WALLINGFORD, a citizen of the United States, residing at Mount Gilead, in the county of Mason and State of Kentucky, have invented certain new and useful Improvements in Car-Couplings; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

This invention relates to car-couplings; and it consists in the novel construction and combination of the parts hereinafter fully described and claimed.

In the drawings, Figure 1 is a sectional plan view of the device, showing the two halves of the coupling coupled together. Fig. 2 is a front view of one half of the coupling, showing the disengaging devices. Fig. 3 is a side view showing the two halves of the coupling before being pushed together.

A is a hollow block adapted to be secured to one end of a car and provided with the buffer-pieces *a* in front for striking against the other half of the coupling.

B B are two bars provided with hooks *b* at their front ends, and *b*² is a pin which passes through the block A and through the rear ends of said bars.

C is a single spring, which has a central part coiled about pin *b*², and has its ends firmly secured to the two front ends of the bars B B. This spring presses the hooks apart and causes them to bear against the stops *c* at the front end of block A. This construction permits the back of either hook to be pressed over against the other, or the backs of the hooks may meet in the center if the pressure on both sides is applied equally. It will be seen that the spring is not weakened by rivet-holes and fastenings.

b' are inclined or pointed portions on the front ends of the hooks, so that they may engage automatically with the other half of the coupling.

D is a block adapted to be secured to the opposed end of the next car. This block is provided with the central hole D', having beveled side edges *d* for the portions *b'* of the hooks to strike against and shoulders *d'* behind said beveled portions for the hooks to

engage with. When the cars are pushed together, the hooks are pressed toward each other until they pass through the hole D'. The spring C causes the hooks to engage with the shoulders as soon as the hooks are through the hole.

E is a locking-tongue provided with a rod *e*, and E' is the guide for the said rod secured to the block D.

F is a loop formed in the upper part of rod *e*, and F' is a bracket adapted to be secured to the end of the car and provided with three steps *f*. When the cars are coupled, the rod *e* is lowered until the loop rests upon the bottom step and the tongue is held between the hooks, thereby preventing them from being pressed together and becoming uncoupled from the shoulders.

G G are two plates pivoted at their bottom edges on the pin *g* under the middle of the hole D' of block D.

H are inclined rods, which are pivoted to the arms *g'*, which project from the plates G, and the said rods are provided with eyes *h* at their upper ends for the rod *e* to pass through.

H' is a stop upon the rod *e* for engaging with the eyes *h*. When the cars are to be uncoupled, the rod *e* is raised and the loop passed over the top step or hook of the bracket F'. During the first half of its upward travel the rod *e* merely raises the locking-tongue from between the hooks *b*, thereby permitting them to be pushed together, and the rod may be held in this position by passing the loop over the middle step or hook *f*. When the rod *e* arrives at its middle position, the stop H' meets the eyes *h*, and during the second half of its upward travel the said rod raises the inclined rods H and turns the plates G upon their pivot. The vertical portions *h'* of said plates press together the hooks *b*, so that they may pass rearwardly through the hole D'. The plates are restored to their original position and the tongue is held in its middle position by lowering the rod *e* until the loop F engages with the middle step or hook *f*, when the parts are again in position to be recoupled. The rod *e* may be worked from the roof of the car or from either side of it in any approved manner.

What I claim is—

1. In a car-coupling, the combination, with a block provided with a central hole having beveled front edges and shoulders behind said edges, of a hollow block provided with a vertical pin, two bars having their rear ends pivoted on said pin and having pointed hooks at their front ends for engaging with the said central hole when the blocks are pushed together, and a single spring coiled about the said pin and having its ends firmly secured to the said bars, substantially as and for the purpose set forth.

2. In a car-coupling, the combination, with a block and two projecting spring-actuated hooks pivoted therein, of a block provided with a central hole and shoulders for said hooks to engage with and a vertically-movable locking-tongue adapted to beslid between the ends of the hooks, substantially as and for the purpose set forth.

3. In a car-coupling, the combination, with a block and two projecting spring-actuated hooks pivoted therein, of a block provided with a central hole and shoulders for said hooks to engage with, the plates pivoted at their bottom edges to a pin under said hole

and provided with vertical portions at each side of the hole, and rods for turning said plates simultaneously on their pivot and thereby detaching the coupling-hooks, substantially as and for the purposes set forth.

4. In a car-coupling, the combination, with a block and two spring-actuated hooks pivoted in said block, of a block provided with a central hole and shoulders for said hooks to engage with, the disengaging-plates pivoted under said hole, the inclined rods provided with eyes at their upper ends, the locking-tongue, the rod for raising said tongue provided with a stop adapted to engage with the said eyes and to actuate the disengaging-plates when the locking-tongue has been withdrawn from between the coupling-hooks, and a stepped bracket adapted to support the said rod at different positions, substantially as and for the purpose set forth.

In testimony whereof I affix my signature in presence of two witnesses.

GEORGE W. WALLINGFORD.

Witnesses:

M. T. GODDARD,
LABE L. FARROW.