

G. A. NEAL.
Car-Coupling

No. 211,341.

Patented Jan. 14, 1879.

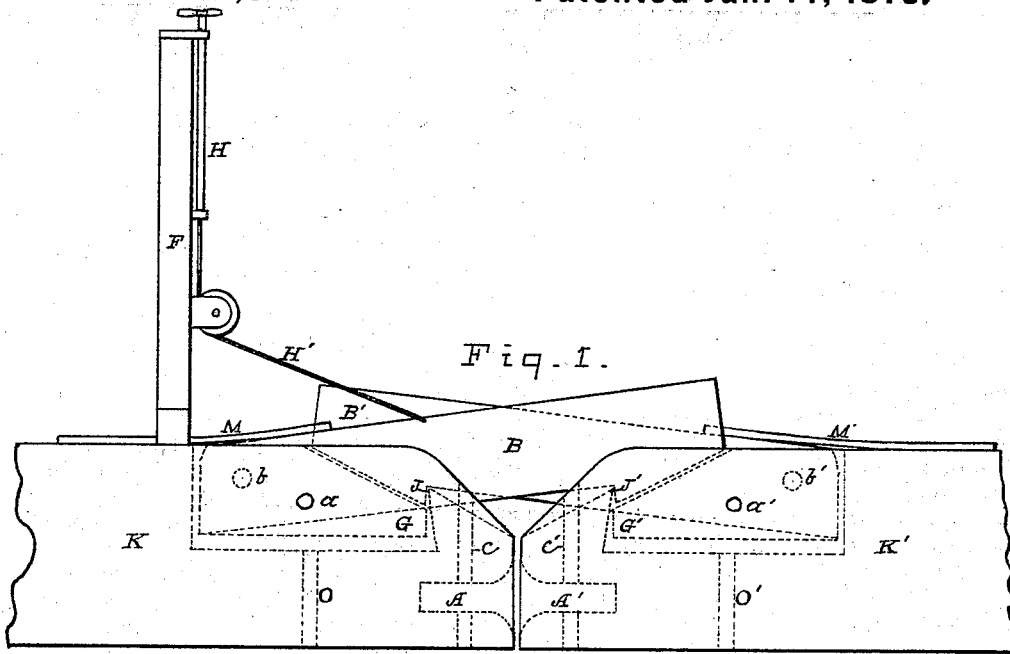
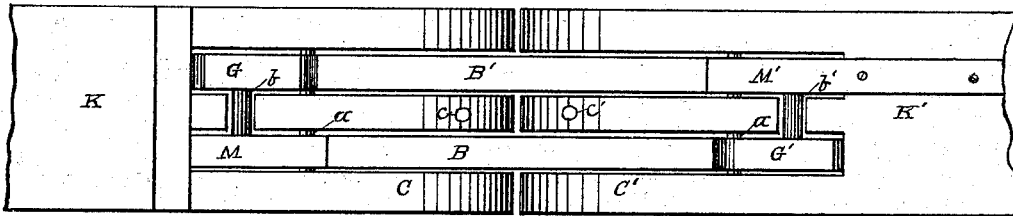


Fig. 2.



Witnesses:
John A. Hughes
John Conger

Inventor:
George A. Neal,
By J. S. Berke,
Atty.

UNITED STATES PATENT OFFICE.

GEORGE A. NEAL, OF SMITHFIELD, KENTUCKY.

IMPROVEMENT IN CAR-COUPINGS.

Specification forming part of Letters Patent No. 211,341, dated January 14, 1879; application filed December 8, 1877.

To all whom it may concern:

Be it known that I, GEORGE ALFRED NEAL, of Smithfield, in the county of Henry and State of Kentucky, have invented a new and useful Improvement in Automatic Car-Couplings, which improvement is fully set forth in the following specification, and accompanying drawing, in which—

Figure 1 represents a side view of my coupling. Fig. 2 shows the top plan.

The object of my invention is to furnish a safe, simple, and cheap automatic car-coupler that can be readily applied to new cars having the old coupling-bar.

Similar letters of reference indicate corresponding parts.

In the drawings, A A' represents slots or openings similar to those in the old-style bar for using links. *c c'* are the holes for pins. By this means the bar can be coupled to any of the cars now in operation.

K K' represent the bars of my coupling. These bars are provided with slots in which the coupling-bars B B' operate.

The bars K K' are provided with catches J J', which engage the hooks on coupling-bars B B'. These bars are rigidly connected with arms G G' by means of studs or bolts *b b'*, and when it is desired to uncouple the bars the coupling-bars B B' are raised, disengaging them from the catches J J'.

It will also be seen that by raising either the coupling-bar B or B' both hooks will be disengaged, since the arm G, disengaging coupling-bar B', is attached to bar B.

The coupling-bars B B' are pivoted at *a a'*. The fulcrum being placed nearer to the point of the arms G G' enables the operator to more easily disengage the catches on the coupling-bars B B'.

F represents the end of a freight-car provided with connecting-rod H, to which is attached a chain, H'. By means of this rod the bars are raised, for uncoupling, from the tops of cars. For ordinary passenger or platform cars the hooks can be detached by simply raising either of the coupling-bars.

O O' are perforations to prevent moisture from accumulating in the slots of the coupler. M M' are springs to hold the coupling-bars in position, although I do not claim that they are absolutely necessary in practical operation.

I am aware that hooked coupling-bars and the devices by which both coupling-bars are disengaged by the raising of one of the bars are not new, nor do I claim such as my invention; but heretofore in the construction of coupling-bars the shafts or pivotal points of the bars were depended on to form the connection between the bars in coupling or uncoupling, whereas in my invention the studs or bolts *b b'*, connecting operating-arms G G' with the coupling-bars, are removed from the pivotal point of the bars.

Having thus described my invention, what I claim is—

In a car-coupler, the combination of the arms G G', rigidly connected with coupling-bars B B' by means of studs or bolts *b b'* and coupling-bars B B', substantially as shown and described.

In testimony that I claim the foregoing I have hereunto set my hand this 23d day of November, 1877, in the presence of witnesses.

GEORGE ALFRED NEAL.

Witnesses:

WM. A. PERRY,
W. O. MCBURNEY.