J. H. WOOD.

CAR-COUPLING.

No. 182,506. Patented Sept. 19, 1876.

Fig. 1.

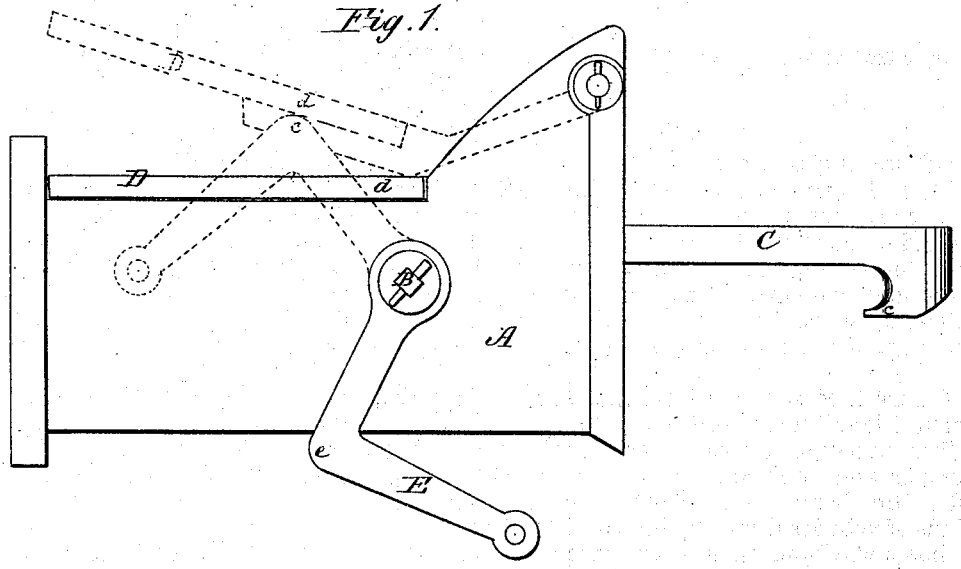
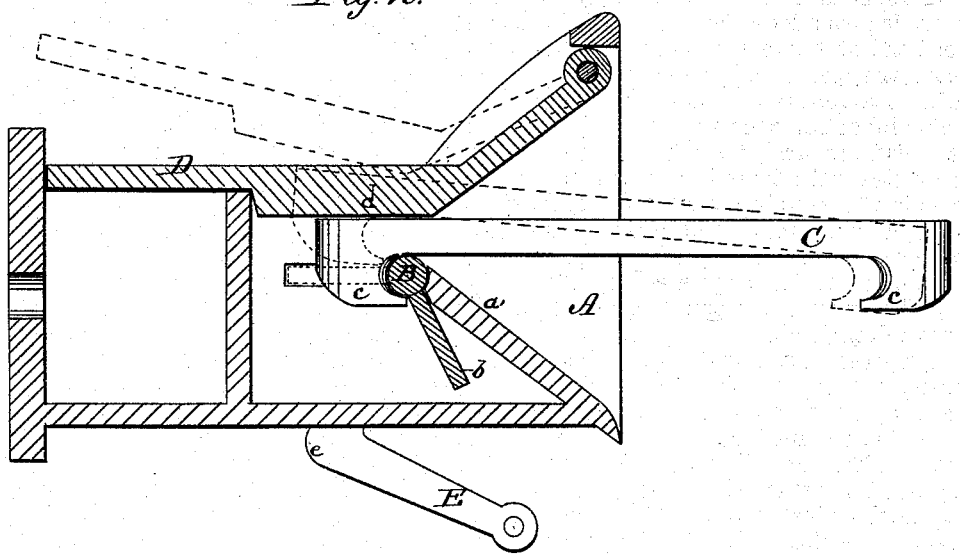


Fig. 2.



WITNESSES:

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UNITED STATES PATENT OFFICE.

JAMES H. WOOD, OF BALTIMORE, MARYLAND, ASSIGNOR TO HIMSELF AND ELISHA DAVIS, OF TUNNELTON, WEST VIRGINIA.

IMPROVEMENT IN CAR-COUPLINGS.

Specification forming part of Letters Patent No. **182,506**, dated September 19, 1876; application filed June 17, 1876.

To all whom it may concern:

Be it known that I, JAMES H. WOOD, of Baltimore city, State of Maryland, have invented a new and Improved Car-Coupling; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawing, forming part of this specification, in which—

Figure 1 is a side elevation. Fig. 2 is a vertical longitudinal section.

The invention relates to a self-coupling car-bumper and hook-coupling bar intended for all railroad-cars, without exception, and for kinds of vehicles drawn by horses. The bumper has a shaft-pin, with lifter attached on inside and cranks on each side of shaft (on outside of bumper) for turning shaft up, so as to bring the lifter against end of coupling bars or links, so as to raise it off from the shaft. There is also a loose top lid with bolt through front end of bumper to keep it in its proper place, the rear of lid being heavy enough to balance coupling-bar when set in place.

The invention consists in providing a draw-head with an armed shaft that couples and uncouples with a hook-bar; in a presser-board to hold the coupling-bar in place, hinged to front of draw-head, and forming the cover thereof; also, in employing a crank so constructed as to lift the presser-bar at the same time that it raises the coupling-bar, all as hereinafter described.

A represents a draw-head, having the usual flaring mouth, and provided with inclined plane *a*, and a rock-shaft, B, situated just at the end of the inclined mouth and on the bottom side thereof. To this the link or coupling-bar C is attached by one of its end hooks *c c*, which slides up the incline of mouth, and catches over the shaft. The latter is provided with an arm, *b*, which is raised by turning the shaft so as to lift the coupling-bar, and allow it to clear the shaft and escape. D is an upper part or cover of the draw-head, weighted in the middle at *d*, having incline *d'* hinged in front, so as to be raised by the incoming coupling-bar, and made of considerable weight in the rear, so as to press down upon said bar and hold it secured in position. E are crank-arms, having the bend *e*, so that while the arm *b* is lifting the coupling-bar this bend or cam will strike the projecting sides *d*, and lift up the cover or presser D, which would otherwise obstruct the withdrawal.

For coupling up cars these bumpers will always couple themselves, and cannot be uncoupled without turning the crank up against lid, which raises lid up and brings lifter against end of coupling, and raises it out of place. This can be done by a man on either side of car or on top of platform, thus avoiding all danger to employés in coupling up cars. The bumper and coupling can be worked with all ordinary bumpers now in use by means of a hook on one end of bar and a hole in the other end. It will also save a great deal of time in making up trains, and save for the railroad company tons of iron, because the coupling-shaft cannot be taken out. Moreover, these bumpers can be made cheaper than usual, as there is no dressed work required, and to suit any of the bumper-fastenings now in use.

By pivoting my cover D at the upper part of the front of draw-head the pivot is made to perform the important part of holding together, against all strain, the sides that are unconnected at top; and by using a double-hooked coupling-bar I am enabled not only to hold the same down when coupled, but to retain it in a horizontal position so as to be always ready for coupling automatically.

Having thus described my invention, what I claim as new is—

1. The cover D, provided with, at the upper part of the front of draw-head, a fulcrum-pin that serves also to brace and re-enforce the open top of draw-head, as described.

2. The cranks E E, having bend *e*, combined with an armed shaft, B *b*, and a hinged presser-board, having projecting sides *d*, as and for the purpose described.

3. A draw-head having inclined mouth, rock-shaft B with its lift-arm, and the front pivoted cover, all constructed and arranged substantially as and for the purpose specified.

JAMES H. WOOD.

Witnesses:

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