G. M. YOUNG.
Car-Coupling.

No. 197,535. Patented Nov. 27, 1877.

Fig. 1.

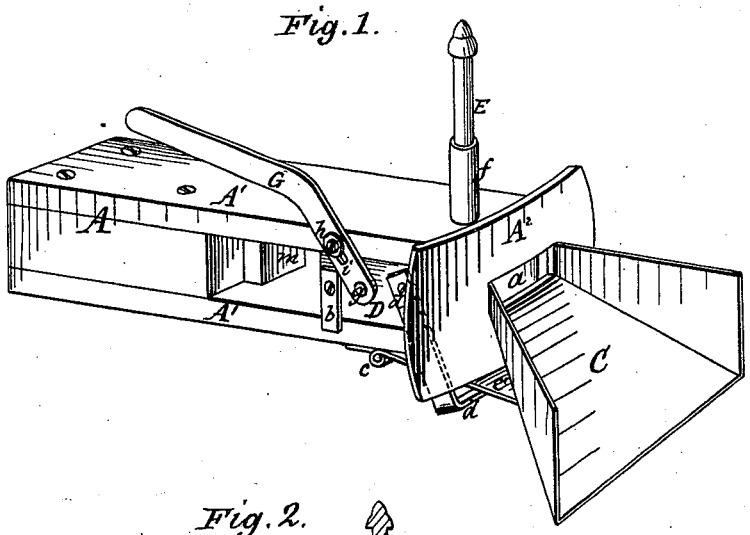


Fig. 2.

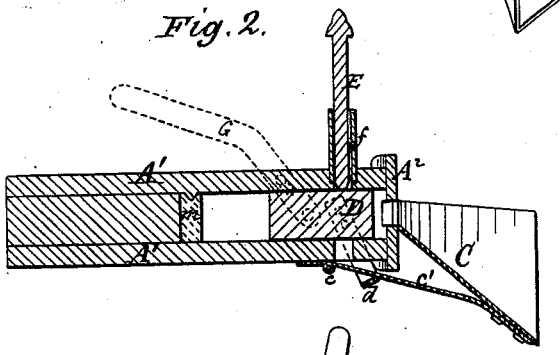
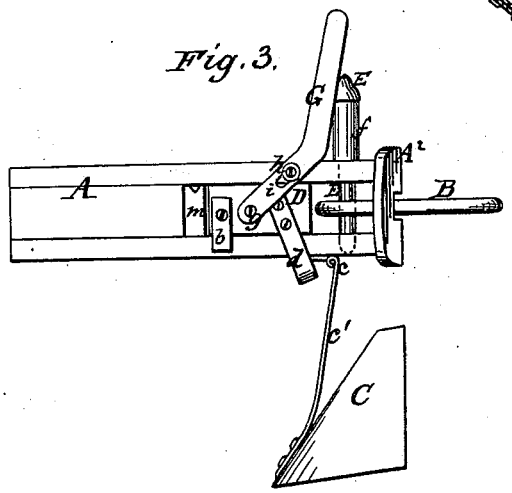


Fig. 3.



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UNITED STATES PATENT OFFICE.

GEORGE M. YOUNG, OF MONTGOMERY, NEW JERSEY.

IMPROVEMENT IN CAR-COUPLINGS.

Specification forming part of Letters Patent No. **197,535**, dated November 27, 1877; application filed November 8, 1877.

To all whom it may concern:

Be it known that I, GEORGE M. YOUNG, of Montgomery, in the county of Somerset and State of New Jersey, have invented certain new and useful Improvements in Car-Couplings; and that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawing, making a part of this specification, in which—

Figure 1 represents one of the couplings, in perspective, in a position to receive the coupling-link. Fig. 2 represents a longitudinal section of the same, and in the same position. Fig. 3 represents a side view of the same, in a position with the link received and held by the coupling-pin.

My invention relates to improvements in car-couplings, by means of which railroad-cars can be united without the danger and inconvenience of going between the cars; and said improvement can be applied with little expense to the ordinary draw-bar and to others. It is formed of very few parts, and without any springs liable to be broken or weakened by use.

My invention consists in a swinging scoop, hinged to the under side of the draw-head to direct the coupling-link into said draw-head, in combination with a sliding block to sustain the coupling-pin in a position ready to engage with the coupling-link, said block being provided with a strap to raise the scoop, and a lever by which it can be moved backward or forward in position to receive the coupling-link.

To enable others skilled in the art to make and use my invention, I will proceed to describe the same with reference to the drawings.

A represents a draw-head made of two parallel bars, A^1, united at the rear, and provided with a face-plate, A^2, having the opening *a*, through which the link B is introduced into the draw-head. This kind of draw-head is used on various railroads. It is simple in construction and much lighter than others, having a flaring opening to receive the link; but it is more difficult to couple than the latter. To remedy this defect, I attach to the under side of the draw-head, by means of a hinge, *c*, the scoop C, to guide and direct the link of an approaching car into the opening *a* of the draw-head. For this purpose it is held up, as shown in Figs. 1 and 2, by the strap *d*, embracing the draw-head, and also the extension *c'* of the hinge; and the extension, being riveted or attached to the under side of the scoop, sustains the latter in the position shown in said figures.

The strap *d* is bolted to a sliding block, D, located between the two parallel bars A^1 of the draw-head. Said block is held in position, connected to the draw-head, by the strap at the forward end, and by two cheek pieces or plates, *b*, or otherwise, at the rear end. At the same time it is made so as to readily slide between the parallel bars A^1, and take a position under the coupling-pin E.

A short length of pipe, *f*, can be secured on top of the draw-head, to retain the coupling-pin in a vertical position, if desired.

The sliding block D can be moved forward and back by means of the lever G, connected at one end by a bolt, *g*, to said block, and pivoted to the side of the draw-head, at *h*, upon a bolt passing through a slot, *i*, in said lever. This lever can then be operated readily from the top or sides of a car or its platform by means of rods and other connections.

The parts being in the position shown in Figs. 1 and 2, the link B of an approaching car is directed by the scoop C into the opening *a* of the draw-head, even if the cars have been built for different-gage railroads, and the draw-heads do not come exactly one opposite the other, and, striking the sliding block D, presses it back, in the position shown in Fig. 3, to the rear portion of the draw-head, where a spring, *m*, is placed to receive the concussion. In the meantime the coupling-pin E, having lost its support on top of the sliding block, drops down through the link B, and enters its lower receiving-hole *f'*. The extension *c'* of the scoop and its hinge being also without support, the scoop drops down by its own weight out of the way of the approaching car, as shown in Fig. 3.

This scoop and sliding block may also be used with draw-heads having a funnel-shaped or flaring opening to receive the link, and the sliding block can be made wholly of metal, or of wood inclosed in metal.

Having now fully described my invention, I claim—

A swinging scoop, hinged to the under side of a draw-head, to direct the coupling-link into said draw-head, in combination with a sliding block, located between the parallel bars A^1 of said draw-head, to sustain the coupling-pin, and a strap, *d*, operating under the hinge-extension *c'*, to raise said scoop, substantially as and for the purpose described.

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