

T. D. SIMPSON.
Car Coupling.

No. 102,978

Patented May 10, 1870.

Fig. 1.

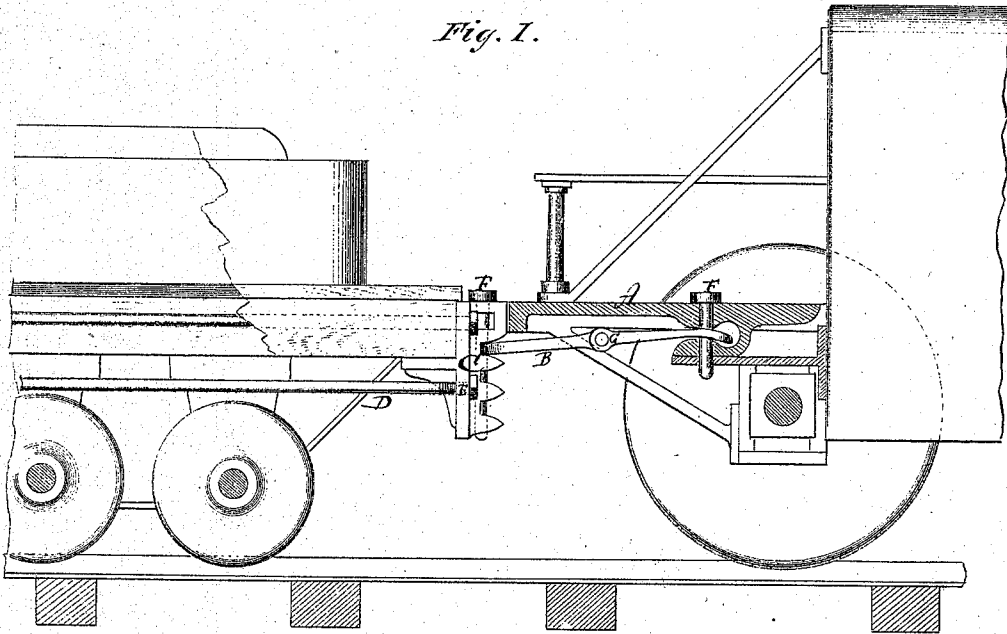


Fig. 2.

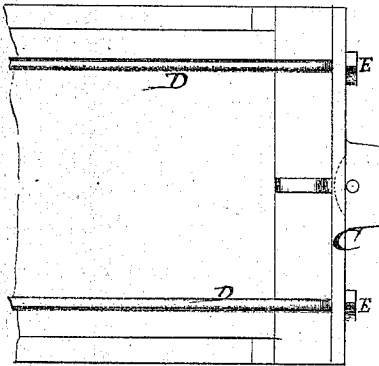
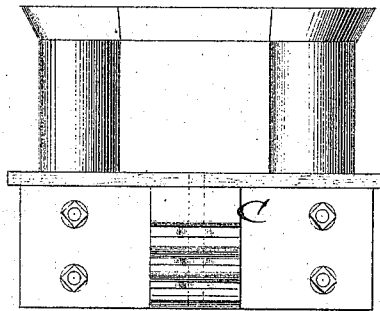


Fig. 3.



Witnesses:
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THOMAS D. SIMPSON, OF MOUNT VERNON, OHIO.

Letters Patent No. 102,978, dated May 10, 1870.

IMPROVEMENT IN LOCOMOTIVE AND TENDER-COUPLING.

The Schedule referred to in these Letters Patent and making part of the same.

To all whom it may concern:

Be it known that I, THOMAS D. SIMPSON, of Mount Vernon, in the county of Knox and State of Ohio, have invented a new and useful Improvement in Coupling; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable others skilled in the art to make and use the same, reference being had to the accompanying drawing forming part of this specification.

This invention relates to a new and useful improvement in a device for coupling a locomotive to the tender, whereby the connection is made more perfect than it has hitherto been, and whereby the traction power of the locomotive is increased; and

It consists in the construction and arrangement hereinafter described.

In the accompanying drawing—

Figure 1 is a side view of the coupling, shown as applied to a locomotive and tender.

Figure 2 is a sectional view of the under side of the tender, showing the position of the pulling-bolts.

Figure 3 is a view of the front end of the tender, showing the block by means of which the coupling-bar is adjusted.

Similar letters of reference indicate corresponding parts.

A represents the foot-board of the engine;

B is the coupling-bar;

C is the coupling-block;

D represents long bolts, (four, more or less,) extending from one end of the tender to the other, called "pulling-bolts."

The coupling-blocks C are the same on each end of the tender, and the pulling-bolts D pass through them, as seen at E in the drawing.

F represents the coupling-pins, applied as seen in fig. 1.

G is a joint in the coupling-bar B. It will be seen that the coupling-bar stands at an angle, the back or

tender end being considerably the lowest, and that it may be so adjusted on the block C as to drop more or less, as may be desired.

By this means the weight of the tender is made to bear, more or less, upon the driving-wheels of the locomotive, and thereby increase the traction or adhesive power of those wheels to the rails.

The tendency of the pull of the locomotive is to raise the forward end of the tender, and the harder the pull the greater will be the tractive power of the engine.

This arrangement prevents the slipping of the driving-wheels on the rail, and, consequently, the loss of steam occasioned thereby.

In slackening the speed or stopping, or in backing, the joint G in the coupling-bar will give, and allow the engine to push back on a level with the tender.

If the coupling-bar was a single piece, or rigid, the tendency in backing would be to raise the engine from the track, but the joint prevents it.

By applying the two coupling-blocks C to the tender connected by the "pulling-bolts," as seen in the drawing, the entire improvement may be applied in coupling any locomotive and tender, thus increasing the power of the engine, and saving time as well as steam.

Having thus described my invention,

I claim as new and desire to secure by Letters Patent—

The recessed platform A of the locomotive, and the jointed link B pivoted therein, in combination with the coupling-block C, provided with three or more recesses, and with pulling-bolts D of the tender, all said parts being constructed and arranged as herein shown and described.

THOS. D. SIMPSON.

Witnesses:

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