

L. J. SMITH.
Car Coupling.

No. 107,971.

Patented Oct. 4, 1870.

Fig. 1

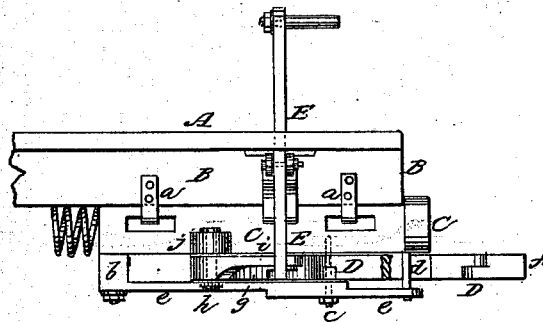


Fig. 2

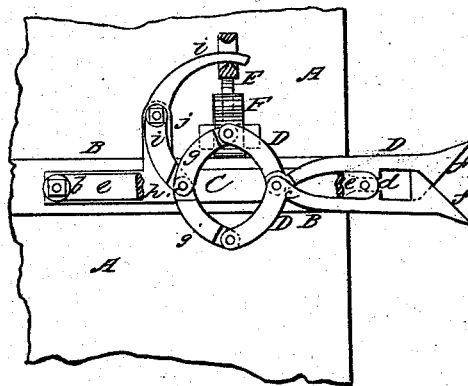
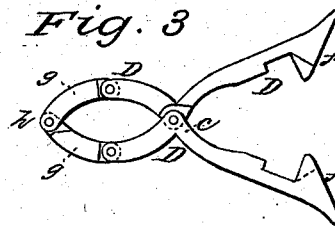


Fig. 3



Witnesses:

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PER

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LOYST J. SMITH, OF NEW YORK, N. Y., ASSIGNOR TO HIMSELF AND H. D. BLAKE, OF SAME PLACE.

Letters Patent No. 107,971, dated October 4, 1870.

IMPROVEMENT IN CAR-COUPPLINGS.

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, LOYST J. SMITH, of New York city, in the county of New York and State of New York, have invented a new and improved Car-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, in which—

Figure 1 represents a side view, partly in section, of my improved car-coupling.

Figure 2 is an inverted plan view, partly in section, of the same.

Figure 3 is a plan view of the jaws, showing them distended.

Similar letters of reference indicate corresponding parts.

My invention relates to car-couplings, and consists in an improved combination and arrangement of parts, as hereinafter described and specified.

A in the drawing represents the platform, and

B is the frame of the car to which my improved coupling is secured.

From the under side of the frame B is suspended, by means of straps *a a*, or equivalent fastenings, the buffer C, which is thrown forward by a suitable spring, and longitudinally adjustable by being slotted, as shown.

From the buffer project downward three pins, *b*, *c*, and *d*, which hold a horizontal longitudinal strap or plate *e*, as shown.

The middle pin, *c*, serves as a pivot for the jaws D. Each jaw is made in form of an L-shaped lever, pivoted at the joint of its arms, and provided with a triangular projection, *f*, at the front end.

The rear ends of the levers D are pivoted to two jointed arms, *g g*, and thereby connected.

To the pivot *h* of the arms *g* is also secured one end of a lever, *i*, which is pivoted to an arm, *j*, of the buffer, and which, at its outer end, is connected with a lever, E.

The latter is fitted through the car-platform, and has a handle at its upper end, so that it can be swung to carry the jointed ends of the arms *g* backward. The front ends of the jaws D are thereby opened, as in fig. 3, to uncouple the cars.

A spring, F, is applied to the jaws, or their connections, for holding them closed.

The front pin *d*, serves as a coupling-pin, entering between the jaws D of the other car. It is then locked behind the triangular projections *f* of the same. These projections overlap each other, as shown, and are held together by the spring F. Their beveled inner edges form an angular recess, into which the pin from the other car enters to spread the jaws apart.

The arms *g* may, if desired, be pivoted to the plate *e*, in which case the jaws can only be opened by moving the said plate backward. The pivot *c* will then slide in a slot of the plate *e*.

Having thus described my invention,

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

The suspended buffer C, plate *e*, jaws D D, jointed arms *g g*, and lever *i*, all combined, constructed, and relatively arranged as and for the purpose described.

LOYST J. SMITH.

Witnesses:

GEO. W. MABEE,
ALEX. F. ROBERTS.