

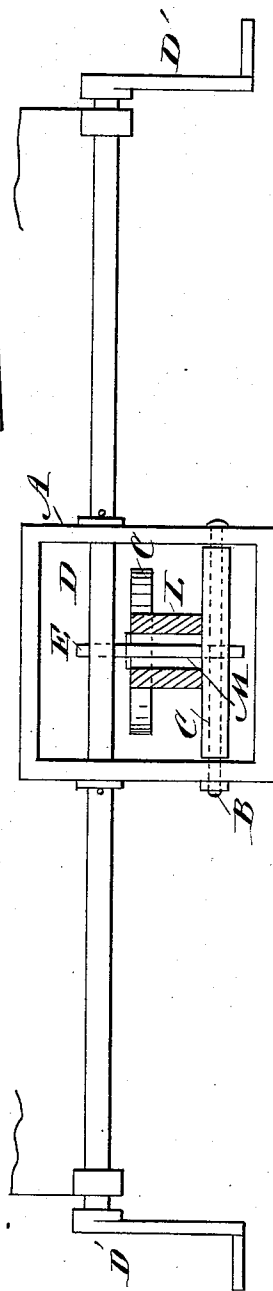
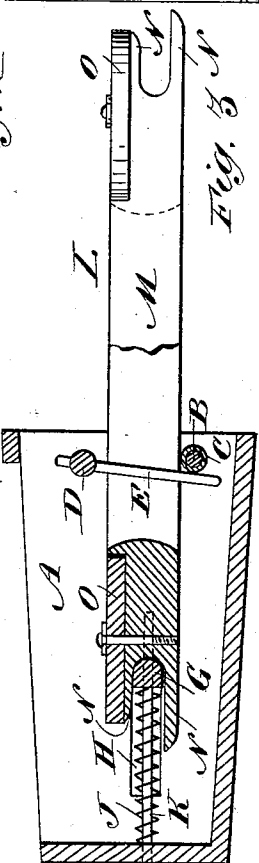
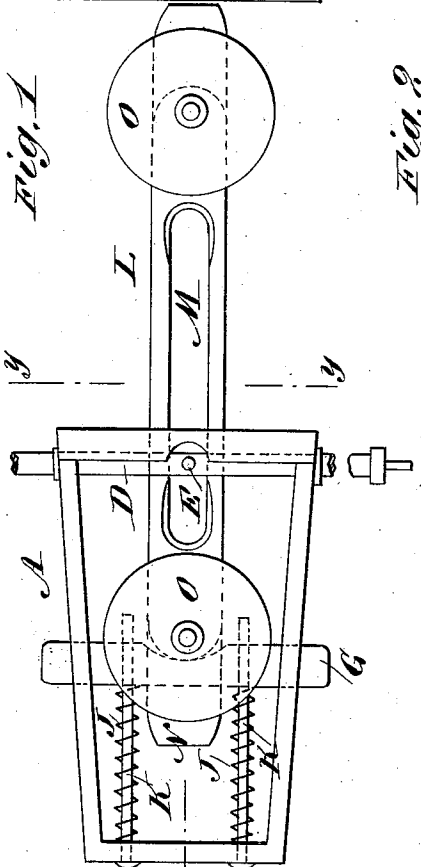
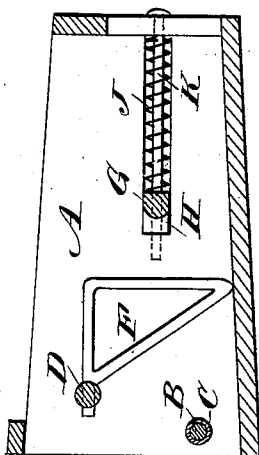
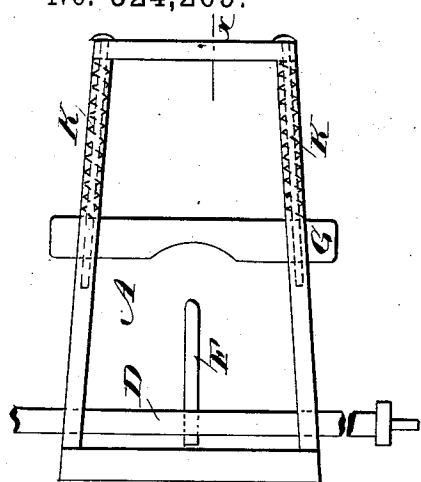
(No Model.)

P. J. NORTON.

CAR COUPLING.

No. 324,269.

Patented Aug. 11, 1885.



WITNESSES:

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UNITED STATES PATENT OFFICE.

PHILO JAY NORTON, OF BRISTOL, NEW YORK.

CAR-COUPLING.

SPECIFICATION forming part of Letters Patent No. 324,269, dated August 11, 1885.

Application filed December 19, 1884. (No model.)

To all whom it may concern:

Be it known that I, PHILO JAY NORTON, of Bristol, in the county of Ontario and State of New York, have invented a new and Improved Car-Coupling, of which the following is a full, clear, and exact description.

The invention consists in a draw-head provided with a transverse buffer-bar arranged to slide in the draw-head in the direction of the length of the same, the said bar being guided by slots in the sides of the draw-head and being pressed toward the outer end of the draw-head by springs.

The invention also consists in a coupling-link having a longitudinal slot, two longitudinal prongs at each end, and a head or disk on the upper surface at each end.

Reference is to be had to the accompanying drawings, forming part of this specification, in which similar letters of reference indicate corresponding parts in all the figures.

Figure 1 shows two of my improved car-couplings in plan view. Fig. 2 is a longitudinal sectional elevation of the same on the lines *xx*, Fig. 1. Fig. 3 is a cross-sectional elevation of the same on the line *yy*, Fig. 1.

In the outer end of the draw-head A a rod, B, is secured, a short distance above and parallel with the bottom of the draw-head, and on the said rod a sleeve, C, is mounted to turn loosely. Above the said rod B a transverse shaft, D, is journaled, the ends of which extend to the sides of the car, and are provided with crank-handles D', hand-wheels, or analogous devices for turning the shaft. From the said shaft D a coupling-pin, E, or frame F, projects downward at the middle of the draw-head, the said pin or frame when swinging downward being behind the rod B. The front piece of the frame F is inclined downward and toward the rear.

A transverse buffer-bar, G, is passed through longitudinal slots H in the sides of the draw-head, and is thus guided to slide forward and back. The buffer-bar G is pressed toward the front of the draw-head by spiral springs J, surrounding rods K, fixed on the rear end of the draw-head and projecting loosely through the buffer-bar. The rods K can be

arranged between the sides of the draw-head or in the slots J H.

The coupling-link L has a vertical longitudinal slot, N, extending nearly from end to end, and at each end has two horizontal prongs, N, the lower prongs projecting beyond the upper prongs.

A disk, O, is pivoted on each end of the link in a recess in the top of the upper prong. The ends of the prongs are beveled.

The operation is as follows: When a draw-head is not coupled the free end of the coupling pin or frame rests on the bottom of the draw-head. The entering link slides over the sleeve C, swings back the coupling-pin or frame, and strikes the buffer-bar G, which passes in between the prongs N. The buffer-bar breaks the shock, is pushed back, and the springs K are compressed. The coupling pin or frame drops through the slot M, and the cars are thus coupled.

To uncouple, the coupling pin or frame is swung up by means of the shaft D and the handle D'. When the link enters at an angle the edge of the entering disk O strikes against the inner surface of one side of the draw-head, and thus the inner end of the link is guided to the middle of the buffer-bar.

I prefer to pivot the disks or flat heads O, but they can be held rigidly, if desired.

The upper surfaces of the draw-head are covered, with the exception of the slot through which the pin E or the frame F swings.

In uncoupling, the frames F are swung up, and as the link is withdrawn it strikes the short projection formed by the frame F, on that side of the shaft D opposite the one on which the frame F is held, thereby swinging the frame F down ready in position for coupling.

Having thus described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. In a car-coupling, the combination, with the draw-head A, of the rod B, the sleeve C, the buffer-bar G, and the springs J, substantially as herein shown and described.

2. A coupling-link having a disk pivoted

on the uppersurface at each end, substantially as herein shown and described.

3. A coupling-link provided with a longitudinal slot from top to bottom and two horizontal prongs at each end, substantially as
5 and for the purpose set forth.

4. A coupling-link provided with a longitudinal slot, two prongs at each end, and a

disk pivoted on the upper surface at each end, substantially as herein shown and described. 10

PHILO JAY NORTON.

Witnesses:

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F. K. McMANN.