

(No Model.)

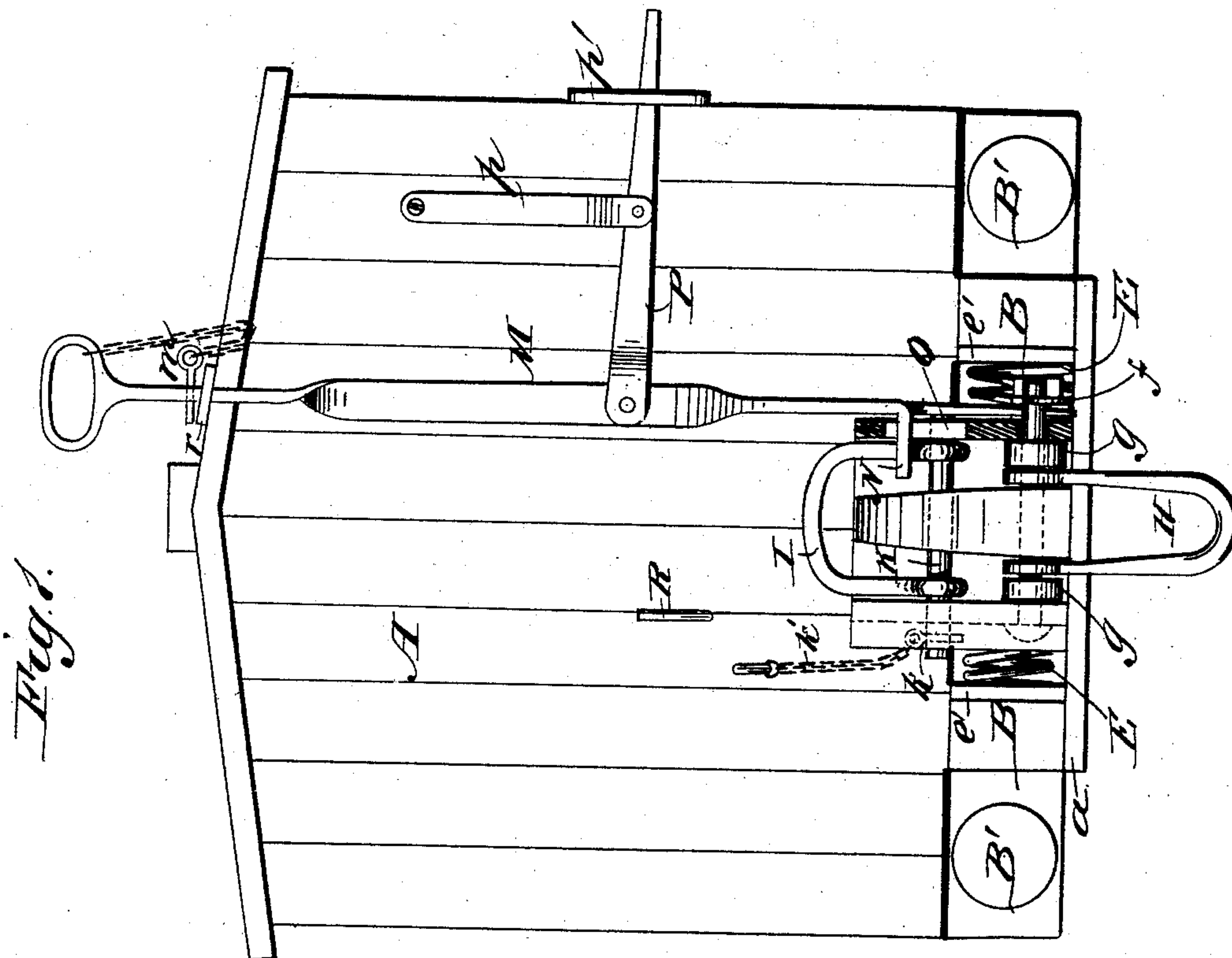
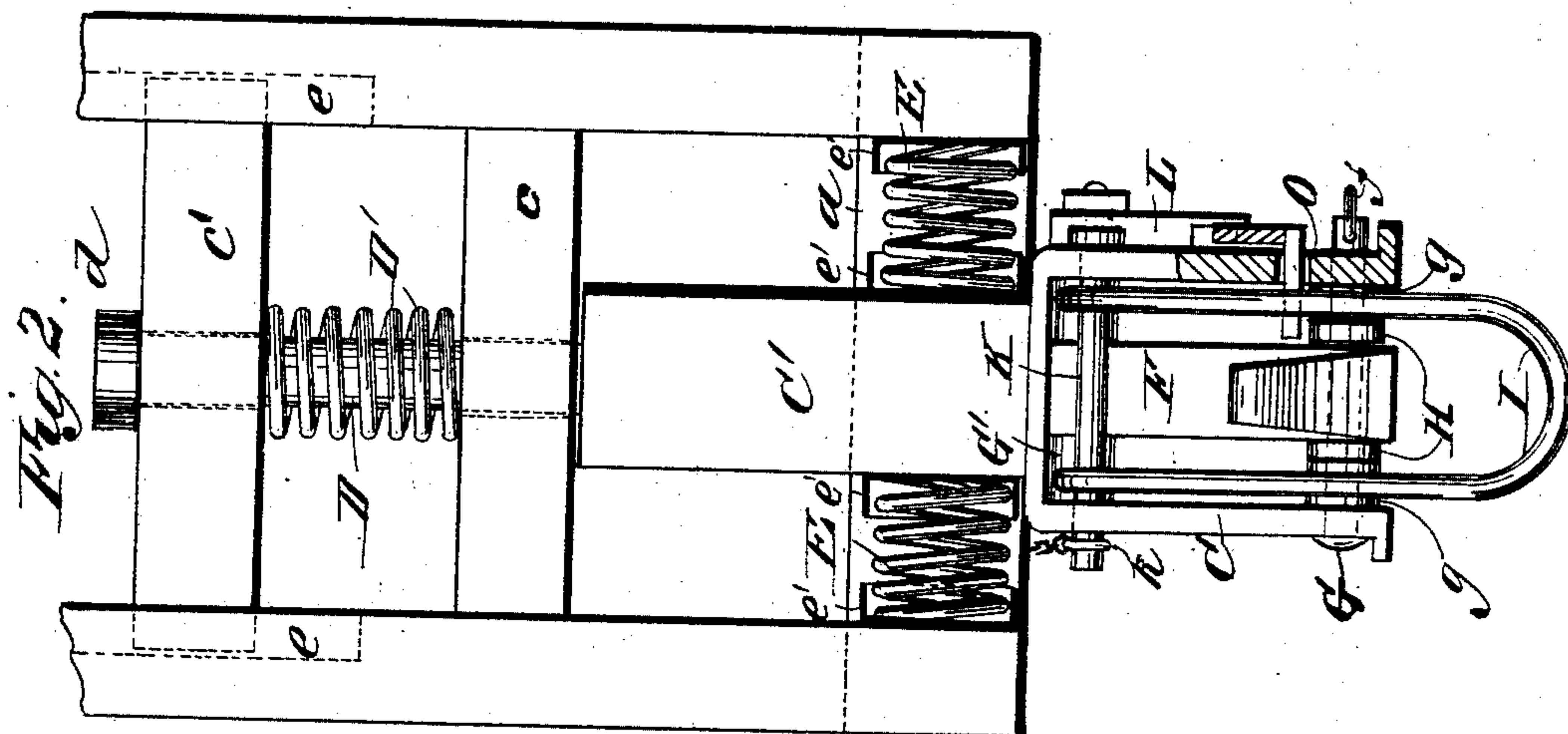
2 Sheets—Sheet 1.

P. F. RAUDEBAUGH.

CAR COUPLING.

No. 328,251.

Patented Oct. 13, 1885.



WITNESSES:

F. Mc Ardle.
L Sedgwick

INVENTOR:

P. F. Raudebaugh
 BY *Munn & Co*
 ATTORNEYS.

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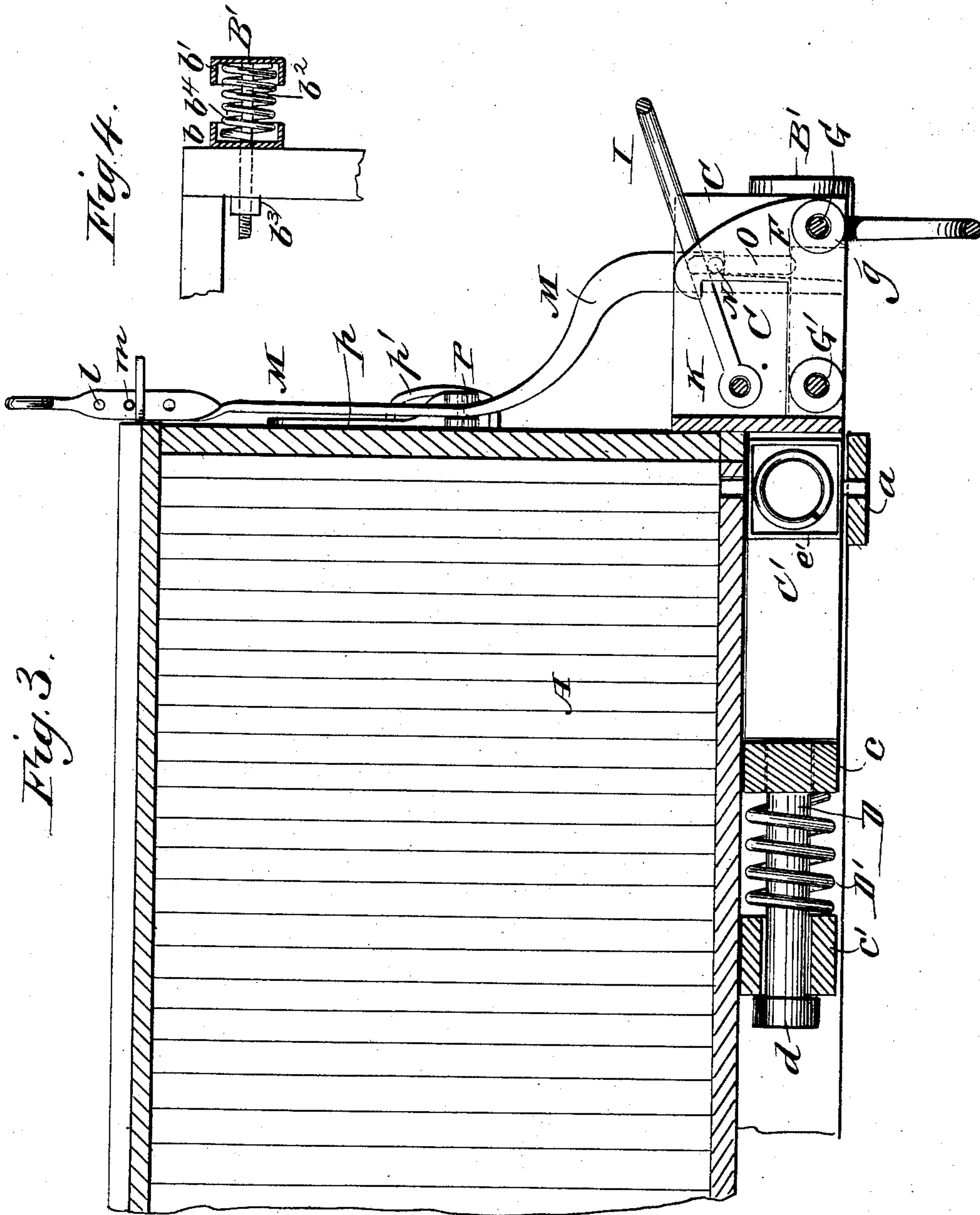
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UNITED STATES PATENT OFFICE.

PERRY F. RAUDEBAUGH, OF FLORENCE, KANSAS.

CAR-COUPLING.

SPECIFICATION forming part of Letters Patent No. 328,251, dated October 13, 1885.

Application filed May 29, 1885. Serial No. 167,088. (No model.)

To all whom it may concern:

Be it known that I, PERRY F. RAUDEBAUGH, of Florence, in the county of Marion and State of Kansas, have invented certain new and useful improvements in Car-Couplings, of which the following is a full, clear, and exact description.

This invention relates to certain improvements in car-couplers; and it has for its object to provide for coupling the cars when two come together, and for uncoupling the same from the top or either side of the cars, thus avoiding the danger of accidents incident to the uncoupling and coupling of cars in the ordinary manner.

The invention consists in the improved construction and combination of parts, as will be hereinafter fully described and claimed.

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 represents a view of the end of a car having my improved coupler applied. Fig. 2 is a plan view with the body of car removed. Fig. 3 is a longitudinal vertical section. Fig. 4 is a detail view of the end sill of a car with the buffers attached.

In the drawings, A is the body of car, and B the stringers thereof. B' are buffers held to the front sill of the car, and extending slightly in advance of the draw-head C, so as to act as a guard for the draw-head against destruction when the cars come together with great violence. The buffers B' are composed of the caps *b b'*, of which the cap *b* is rigidly attached to the sill of car, and the cap *b'* has the spindle *b²*, which passes through the cap *b* and sill of car. The end of the spindle *b²* is screw-threaded to receive the nut *b³*, which holds the spindle and *b'* to the sill of car, and at the same time allows the said spindle and cap *b'* to move toward the car. The spring *b⁴* is held within the caps *b* and *b'*, and receives the shock when the cars come together.

The draw-bar, which passes over the cross-bar *a*, has the spindle D attached to its end, which passes through oblong slots in the cross-bars *c c'*, and has the collar *d* on the end to hold the cross-bar *c'* from moving off the said spindle D. The bar *c'* slides in mortises on

the stringers B. The coiled spring D' encircles the spindle D between the bars *c* and *c'*. This spring acts as a buffer when the draw-bar is being pulled toward the end of the car.

On the cross-bar *a*, between the draw-bar and the stringers B, coiled springs E are placed. The springs E are held by inclosing-caps *e*. The object of these springs is to relieve the draw-head and bar from lateral strain when going around curves.

The oblong slots in the cross bars *c c'* allow the draw-bar C' and spindle D to have lateral movement. The draw-head C is formed of two parallel sides projecting outward from the draw-bar C'.

The hook F is supported in the center of draw-head C by bolts G G'. Suitable washers, *g*, being interposed between the hook F and the sides of the draw-head C on the bolts G G', hold the hook F against lateral movement on the said bolts G G'. The bolts G G' are headed and have pin-holes to receive the pins *f* for preventing the bolts from passing out of the draw-head C.

The bail or link H, which swings on the bolt G, is to be used when the opposite car has the ordinary pin-coupling draw-head. When not desired for use this link H is swung downward out of the way under the draw-head C.

The bail or link I swings in a vertical plane on the bolt K, which passes through the sides of the draw-head C. The bolt K also holds the guide-piece L to the side of the draw-head, and the pin *k* prevents the bolt K from working out of the draw-head C. This pin *k* has a safety-chain, *k'*, which is attached to the body of car to prevent the loss of said pin *k*.

The operating-lever M, extending up to the roof of the car and working freely through keeper *r*, has a suitable handle for working it, and on that portion of the lever M which presents its edge to the car-body a series of pin-holes, *l*, are formed to receive the pin *m*, which pin, when inserted in one of the holes *l*, rests upon the keeper *r*, thus holding the lever M when drawn up. The foot of the lever M is held to the side of the draw-head C by working in the slot formed by the rabbet in the guide L.

The lever M below where the lever P is pivoted curves outward, and then downward, and has an arm, N, which projects at right angles to the lever M through a slot, O, in the side of the draw-head C. The link I rests on the arm N, and can be swung out of engagement with the hook on the opposite draw-head by the said arm N.

The lever P, which is pivoted to the lever M and fulcrumed on the bar *p*, works freely in the keeper *p'*. By means of the lever P the link I can be swung up through the medium of the lever M and its arm N from the side of the car.

In Figs. 1 and 3 the coupling link I, held at an angle to the body of the car by means of the arm N on the lever M, is ready for coupling with the opposite car. When the cars come together, the pin *m* is withdrawn from the hole in the lever M by the operator, the lever M descends, and the link I falls over the hook on the opposite draw-head. By pulling up the lever M the arm N strikes against the link I and raises it out of engagement with the hook F, and the cars are free to separate.

The uncoupling of the cars can be readily and quickly performed from the top and sides of the cars by means of the levers P and M.

When not in use the link I is held upright against the car by means of the hook R on the car-body.

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

1. The combination, with the draw-head C, having the hook F, and the bolts G G' for securing said hook, of the depending link H, pivoted to the pin on which the hook is journaled, and the upper link, I, pivoted in the rear end of the draw-head, and the lever M, for operating the same, substantially as set forth.

2. The combination, with the draw-head C, having slot O, of the hook F, the link I, and the lever M, having arm N, substantially as herein shown and described.

3. The combination, with the draw-head C, having the slot O, of the hook F, the link I, the bolts G, G', and K, the guide L, the lever M, having the projecting arm N, and the lever P, pivoted to lever M and fulcrumed on bar *p*, substantially as herein shown and described.

PERRY F. RAUDEBAUGH.

Witnesses:

C. C. TWYFORD,
R. T. BATHY.