(No Model.)

D. B. PRATT.

CAR COUPLING.

No. 261,953. Patented Aug. 1, 1882.

Fig. 1.

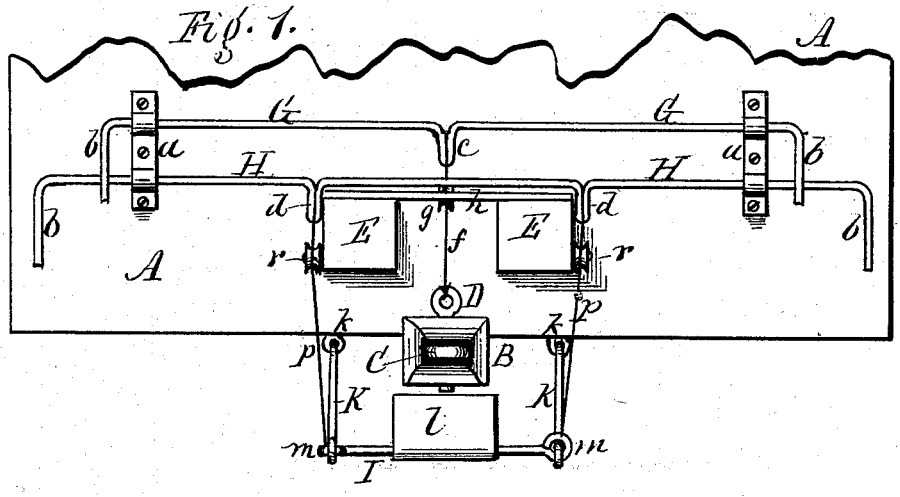


Fig. 2.

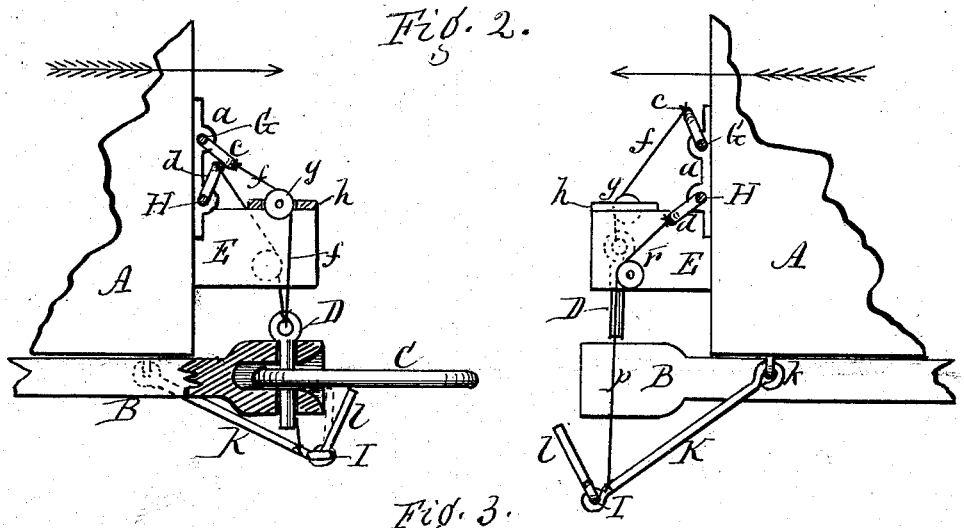
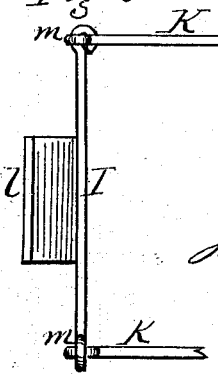


Fig. 3.



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DAVID B. PRATT, OF PERRY CENTRE, NEW YORK.

CAR-COUPLING.

SPECIFICATION forming part of Letters Patent No. 261,953, dated August 1, 1882.

Application filed February 10, 1882. (No model.)

To all whom it may concern:

Be it known that I, DAVID B. PRATT, of Perry Centre, Wyoming county, New York, have invented a certain new and useful Improvement in Car-Couplings; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawings, in which—

Figure 1 is an end elevation of a car, showing my improvement applied thereto. Fig. 2 is a side elevation, partially in section, of the ends of two cars with the couplings arranged in position for engaging together. Fig. 3 is a plan of the device for elevating the link.

The object of my invention is to produce a coupling which can be coupled and uncoupled without going between the cars.

The invention consists in the construction and arrangement of parts hereinafter described and claimed.

In the drawings, A A represent the meeting ends of two railroad-cars.

B B are the draw-heads, arranged in the ordinary way.

C is the link or shackle, and D is the coupling-pin, also of common form.

E E are the bumpers, which receive the concussion in coupling.

My improvement is as follows:

G and H are two long rods or shafts, which rest and turn in bearings *a a* on the ends of the car. They extend nearly across the end of the car, and at the extremities they have crank ends *b b*, by which they can be turned axially by the operator without going between the cars. The upper rod, G, has a single central crank, *c*, and the lower one, H, has two cranks, *d d*, one on each outer side of the bumpers E E, as shown. These cranks are most conveniently made by making bends in the rods, but may be made otherwise, if desired.

f is a cable, cord, or chain connecting the coupling-pin D with the crank *c* of the upper rod. The cable passes over a pulley, *g*, of a strap, *h*, which extends across the top of the bumpers. When the crank *c* is turned down, as shown at the left in Fig. 2, the coupling-pin will fall through its socket in the draw-head and hold the link; when turned up, as shown at the right, same figure, the coupling-pin will be raised and free the link.

I is a cross-bar beneath the draw-head, connected at its opposite ends with two stay-bars, K K, jointed at their rear ends to the bottom of the car, as shown at *k k*, so that they can rise and fall, carrying with them the cross-bar bar. The cross-bar has a fixed plate, *l*, which stands upward in an angular position, so that when raised it will strike under the link or shackle and elevate the latter. The ends of the cross-bar I are jointed to the ends of the stays K K, one horizontally and the other vertically by loop or eye joints *m m*, so that while the plate *l* is kept sufficiently stiff to elevate the link when raised it yet has sufficient turning motion to allow the plate to be turned in against the end of the draw-head when the two draw-heads come together in coupling. Otherwise, and if the plate were perfectly stiff, it would become bent and broken by the concussion when the parts strike together.

p p are two cables, cords, or chains, which connect the outer ends of the two stays K K with the two cranks *d d* on the rod H, said cables passing over pulleys *r r* on the sides of the bumpers to prevent friction and binding. When said cranks are turned up, as at the left in Fig. 2, the plate *l* will strike under the link or shackle C and elevate it to a horizontal or a higher inclined position; when turned down, as at the right in the same figure, the plate *l* will be dropped below the draw-head, so as not to interfere with the entrance of the link on that side.

From the above description the operation will be readily understood. To uncouple the cars the crank-rod G is simply turned up to elevate the coupling-pin. To couple the cars the coupling-pin on one car is removed. On the other it is let down to hold the link, and the link is then elevated to a horizontal or a higher position by raising the plate *l* under it. The cars can then be run together and coupled without the operator going between the cars, he simply operating the parts by standing outside the cars and turning the rods G H.

I am aware that devices are now known for elevating the link and for coupling cars without going between them. Hence I claim only the special devices herein described for the purpose.

I disclaim simply and broadly a jointed

frame and a guide-plate beneath the draw-head; also, shafts and connections for raising the frame.

What I claim, and desire to secure by Letters Patent, is—

In a car-coupling, the combination, with the crank-rods G H and connections *f p*, of the frame consisting of the jointed rods I K K, the outer rod, I, being hinged so as to turn axially, and provided with a plate, *l*, standing angularly under the link, serving to raise the same, and capable of turning between the ends of the draw-heads when they strike together, as herein shown and described.

In witness whereof I have hereunto signed my name in the presence of two subscribing witnesses.

DAVID B. PRATT.

Witnesses:
MORTIMER DURYEE,
C. S. READ.