(No Model.)

S. SCOTT.

CAR COUPLING.

No. 263,816. Patented Sept. 5, 1882.

Fig. 1.

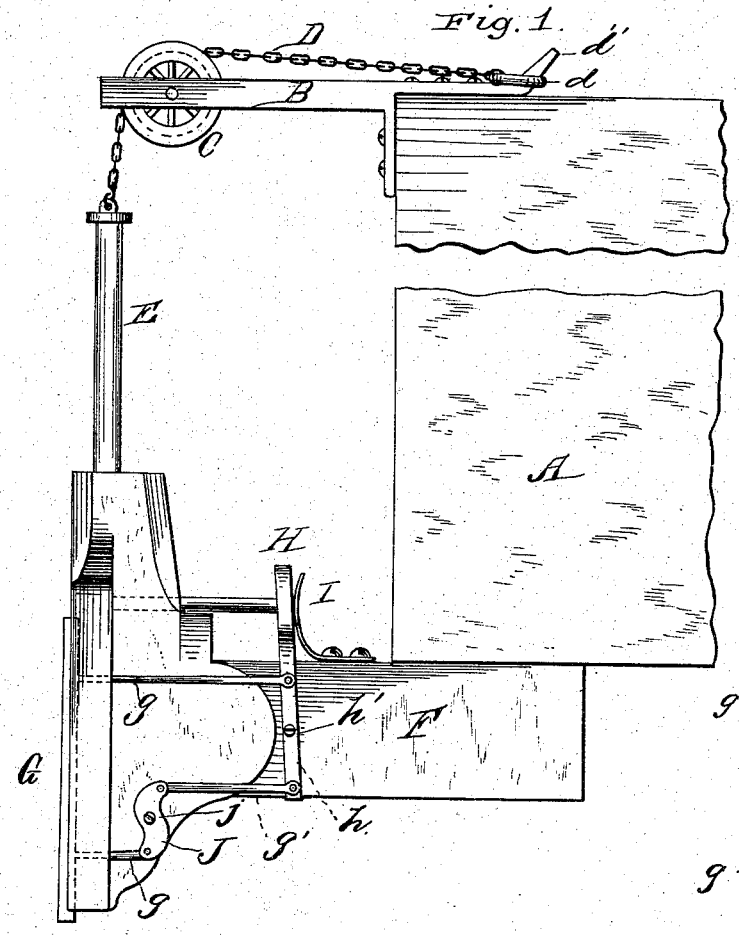


Fig. 2.

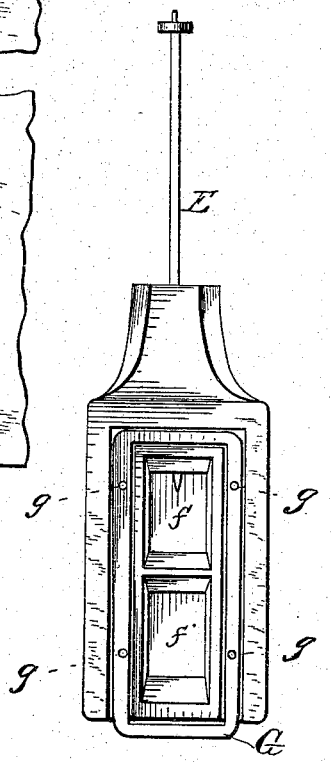
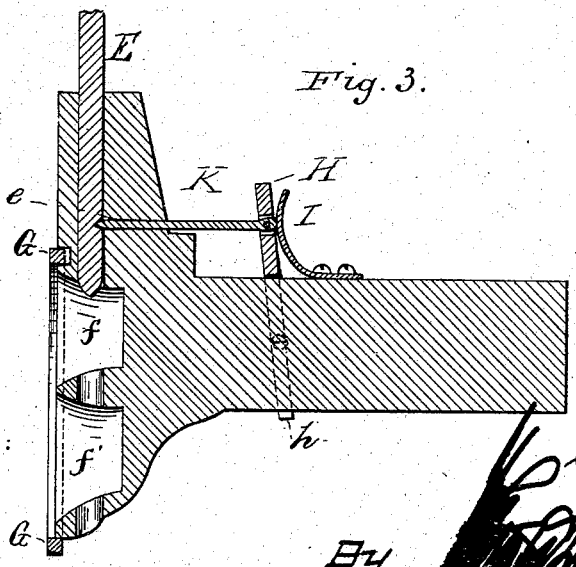


Fig. 3.



Witnesses:

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By

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UNITED STATES PATENT OFFICE.

SOLOMON SCOTT, OF PAOLI, INDIANA.

CAR-COUPLING.

SPECIFICATION forming part of Letters Patent No. 263,816, dated September 5, 1882.

Application filed July 17, 1882. (No model.)

To all whom it may concern:

Be it known that I, SOLOMON SCOTT, a citizen of the United States of America, residing at Paoli, in the county of Orange and State of Indiana, have invented certain new and useful Improvements in Car-Couplers; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to letters or figures of reference marked thereon, which form a part of this specification.

My invention relates to car-couplers; and it consists in certain features hereinafter described, and specifically set forth in the claims.

Figure 1 is a side elevation, Fig. 2 a front elevation, and Fig. 3 a central vertical section, of a car-coupler constructed according to my invention.

Like letters refer to like parts in all the figures.

A represents the body of a car, and B a bracket secured to the top thereof and adapted to support a roller, C, over which passes a chain, D, provided with a ring, *d*, which chain is designed to be connected to the coupling-pin E, and thus, by means of the chain D, it may be withdrawn from the coupler, as hereinafter described, and secured in a withdrawn position by placing the ring *d* of the chain over the rear upwardly-bent extension, *d'*, of the bracket B, as shown.

Attached to the chain D, near the top of the car, and being led over rollers, may be another chain or cord for uncoupling the cars from the ground.

The draw-bar F is recessed at *f f'* for the reception of the coupling-link, the partition between the recesses being perforated for the passage of the pin, as also is the lower wall of the lower recess. Upon the face of the draw-bar is a frame, G, which incloses the recesses *f f'*, and is supported in a recess of the face of the draw-bar by means of four rods, *g*, whereby the frame is adapted to reciprocate in and out of the recess in the face of the draw-bar, and when within the recess the outer face of the frame lies flush with or a little back of the face of the draw-bar. The upper pair of rods *g* extends directly backward to a lever, H, the bifurcated ends *h* of which embrace the draw-bar and are pivoted thereto at *h'*. Against the upper end of the lever a spring, I, presses, said spring being secured in any suitable manner to the draw-bar so as to permit of its longitudinal reciprocation in its bearings, as usual. The lower pair of rods *g* extend to the rear and connect with the lever J, pivoted to the draw-bar at *j*, and from the upper ends of said levers (one only being shown, there being two, one upon each side of the draw-bar or draw-head) extend two rods, *g'*, which are pivoted to the lower ends of the bifurcated arms of the lever H.

At the upper end of the lever H is pivotally secured a locking-bar, K, which passes through the draw-head and into the channel or path of the coupling-pin, said pin being notched at *e* for the reception of the end of the bar K.

This being the construction, the operation is as follows: Whenever by means of the chain or otherwise the coupling-pin is elevated, as shown, the spring I forces the lever H and bar K to the front, inserting the bar into the depression *e* of the coupling-pin, whereby it is retained or set ready for coupling. This forward movement of the upper end of the lever H operates through the means of the rods *g* and levers J to throw the frame G to the front also, so that it projects beyond the face of the draw-bar. When an approaching car, with its link in position, strikes the frame G said frame is depressed within its recess, and through the medium of the connecting-rods the upper end of the lever H is thrown to the rear, drawing with it the locking-bar K, and the pin falls by gravity, securing the link of the approaching car in position.

By use of two recesses a draw-bar is provided which is adapted to receive and couple cars of different heights.

By means of inserting the connecting-link J a movement is secured in the lower links like that of the upper, in both directions, so that the lever H is operated in the manner desired, whether the force be applied at the bottom of the frame G or at the top, or at both bottom and top simultaneously, said operation occurring at these points while coupling cars of different heights.

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

1. In a car-coupler, a draw-bar provided with a recessed face, and a frame adapted to fit said recess and supported by rods, the combination of the rods *g g*, the bifurcated lever H, the links J, the rod *g'*, the locking-bar K, and the pin E, substantially as shown and described.

2. The combination of the chain D, bracket B, wheel C, and notched pin E, with the draw bar F, provided with the bifurcated lever H, locking-bar K, spring I, rods *g g g'*, levers J, and frame G, substantially as shown and described.

In testimony whereof I affix my signature in presence of two witnesses.

SOLOMON SCOTT.

Witnesses:
JOHN W. BROWNE,
WILLIAM TEAFORD.