

W. R. COOVERT.
Car-Couplings.

No. 144,257.

Patented Nov. 4, 1873.

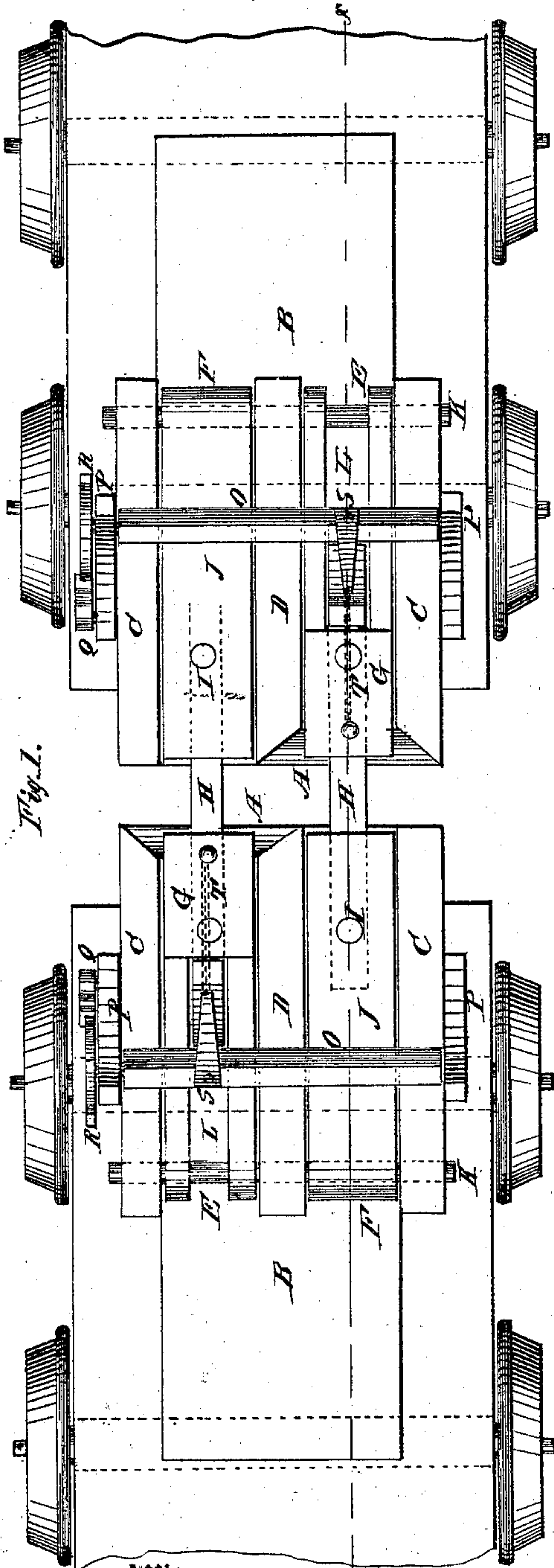


Fig. 1.

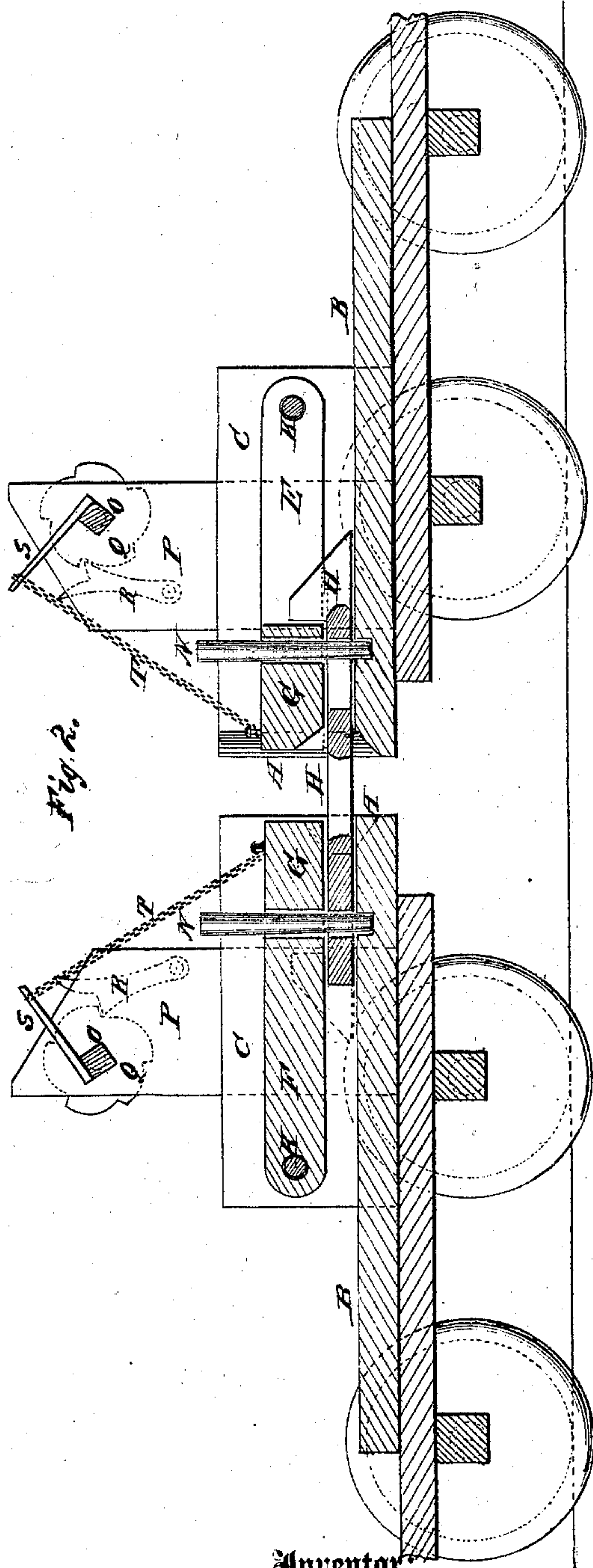


Fig. 2.

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UNITED STATES PATENT OFFICE.

WILLIAM R. COOVERT, OF LONDON, PENNSYLVANIA.

IMPROVEMENT IN CAR-COUPPLINGS.

Specification forming part of Letters Patent No. **144,257**, dated November 4, 1873; application filed February 8, 1873.

To all whom it may concern:

Be it known that I, WILLIAM R. COOVERT, of London, in the county of Mercer and State of Pennsylvania, have invented a new and useful Improvement in Self-Acting Car-Coupling, of which the following is a specification:

My invention is an improvement in the class of car-couplings formed mainly of arrow-headed links or draft bars, and pivoted latch-blocks engaging therewith.

The invention consists in connecting a draft-bar to a pivoted block having a ratchet mechanism for elevating it, so that the pin which connects the two will be disengaged from the draft-bar when the pivoted block is raised, as hereinafter described.

Figure 1 is a top or plan view of two cars coupled according to my invention. Fig. 2 is a vertical longitudinal section of Fig. 1 taken on the line *x x*.

Similar letters of reference indicate corresponding parts.

A is the draw-head, connected with the cars in any suitable manner, consisting of a bed-piece, B, and vertical side pieces C C, with a vertical partition, D, thus dividing the draw-head into two parts, E and F, one of which, E, contains a hinged coupling or latch block, G, which drops for coupling by its own gravity. The other part, F, contains the coupling-hook H. This hook is confined by the pin I, which passes through the hinged block J. The blocks G and J are hinged to the draw-head by the horizontal rod K, which passes through the draw-head. L represents a slot in the coupling-block G. The forward end of this block is beveled, as is also the end of the hook. The latter is in the form of a door-catch, so that when the cars come together for coupling the hook raises the coupling-block and slides

along under it until it enters the slot L. The block then drops over the hook, and securely couples the cars. It will thus be seen that the cars are self-coupling, neither life nor limb being endangered in that usually perilous operation. In order to somewhat relieve the strain on the hooks H, I employ the pins N as auxiliary coupling devices, the same passing through the hinged blocks G and said hooks, as shown. The pins are tapered or enlarged at the upper end, so that when the blocks G are elevated they will be raised also, thereby freeing the hooks H. To uncouple from either side of the cars, I arrange a horizontal rack-shaft, O, supported by the stands P P, which are attached to the sides of the draw-head. This shaft has a ratchet-wheel, Q, on each end, with a pawl, R, attached to the stands. S is an arm attached to the shaft. T is a chain or cord, which connects the arm S with the latch-block G. By turning this shaft about one-fourth of a revolution, the coupling or latch-block is raised with the pin N. There is a slot-mortise, U, in the coupling-hook, which receives the pin N, and allows the necessary longitudinal play to the cars.

I disclaim arrow-headed coupling-bars or hooks; also pivoted latch-blocks.

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

The pivoted latch-block G, pin N, and hook H, in combination with the chain T, arm S, shaft O, ratchet Q, and pawl R, whereby the said block and pin may be raised together, and the hook thereby disengaged, as set forth.

WILLIAM R. COOVERT.

Witnesses:

ROBERT MILLER,
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