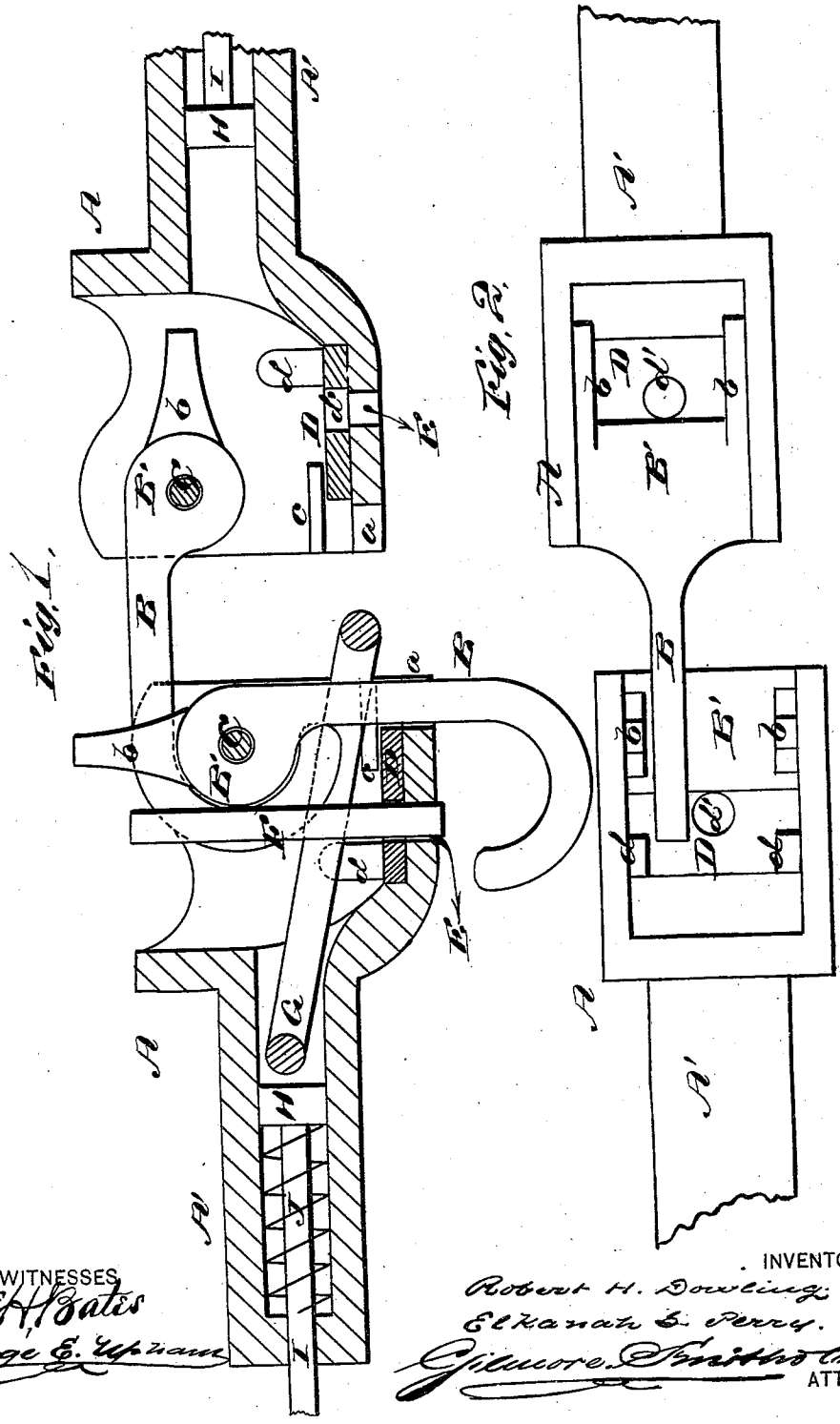
R. H. DOWLING & E. S. PERRY.

CAR-COUPLING.

No. 192,419. Patented June 26, 1877.



WITNESSES.
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UNITED STATES PATENT OFFICE.

ROBERT H. DOWLING AND ELKANAH S. PERRY, OF NEWARK, OHIO, ASSIGNORS OF ONE-FOURTH THEIR RIGHT TO DARWIN DE WOLF, OF SAME PLACE.

IMPROVEMENT IN CAR-COUPLINGS.

Specification forming part of Letters Patent No. **192,419**, dated June 26, 1877; application filed March 24, 1877.

To all whom it may concern:

Be it known that we, ROBERT H. DOWLING and ELKANAH S. PERRY, of Newark, in the county of Licking and State of Oho, have invented a new and valuable Improvement in Car-Couplings; and we do hereby declare that the following is a full, clear, and exact description of the construction and operation of the same, reference being had to the annexed drawings, making a part of this specification, and to the letters and figures of reference marked thereon.

Figure 1 of the drawings is a representation of a central vertical section of our car-coupling, and Fig. 2 a plan view of the same.

This invention relates to car-couplings; and consists in the construction and arrangement hereinafter particularly set forth and claimed.

In the accompanying drawings, A designates two opposite similarly-constructed draw-heads, each of which is open both in front and at the top, and has a recess, *a*, in the middle front edge of its bottom, to receive the hook B when in the perpendicular position. In each draw-head a hook, B, is pivoted, which works vertically and has rearwardly-extending lugs or tails *b b*. These tails are vertical when said hook is thrown up or down into a vertical position. The pivoted part of said hook forms a rounded sleeve, B′, which extends across the interior of the draw-head, and turns on a cross-rod, C. The sides of said draw-head near its mouth are provided with horizontal beads or flanges *c c*, which serve as guides for a small slide, D, that engages (when forced back) with horns or tails *b b*, so as to force hook B downward. Said slide has lugs *d d*, which strike against said horns, and which, by contact with the rear ends of guide-beads *c c*, prevent said slide from separating from the draw-head. The bottom of each draw-head is also perforated at E, near its rear. The construction of said draw-heads, with their attachments above described, is identical.

The coupling is effected as follows: The slide D of one draw-head is forced back within the same until its perforation *d′* coincides with hole E in the bottom of the draw-head. A vertical pin, F, is then passed down through said holes E *d′*, so as to lock said slide in the position stated. The hook B of said draw-head is then turned forward and downward, so as to set into recess *a*, but the hook B of the other draw-head is left in an upright position, its slide D slightly protruding.

When said slide is struck and forced backward by the first-named draw-head it strikes against the horns *b b* of its hook B, causing the same to fall over the sleeve B′ of the opposite hook. The coupling is now complete.

An ordinary link G may be used with pin F and draw-head A for coupling with an ordinary draw-head. Each draw-head A is provided with the usual rearwardly-extending casing A′, which works over the head or disk H on a draw-bar, I. A spring, J, surrounding said bar, is interposed between said disk and the inside of the rear of casing A′. This spring prevents the draft on said draw-head from communicating sudden shocks to the cars in starting.

What we claim as new, and desire to secure by Letters Patent, is—

1. The combination of pivoted hook B with draw-head A, having horns or tails *b b* and slide D, substantially as and for the purpose set forth.

2. The combination of draw-head A, having recess *a*, with pivoted hook B, having sleeve B′ and slide D, substantially as and for the purpose set forth.

3. The combination of draw-head A, having hole E, beads *c c*, and recess *a*, with slide D, having hole *d′*, pin F, and hook B, substantially as and for the purpose set forth.

In testimony that we claim the above we have hereunto subscribed our names in the presence of two witnesses.

ROBERT H. DOWLING.
ELKANAH S. PERRY.

Witnesses:
JOEL M. DENNIS,
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