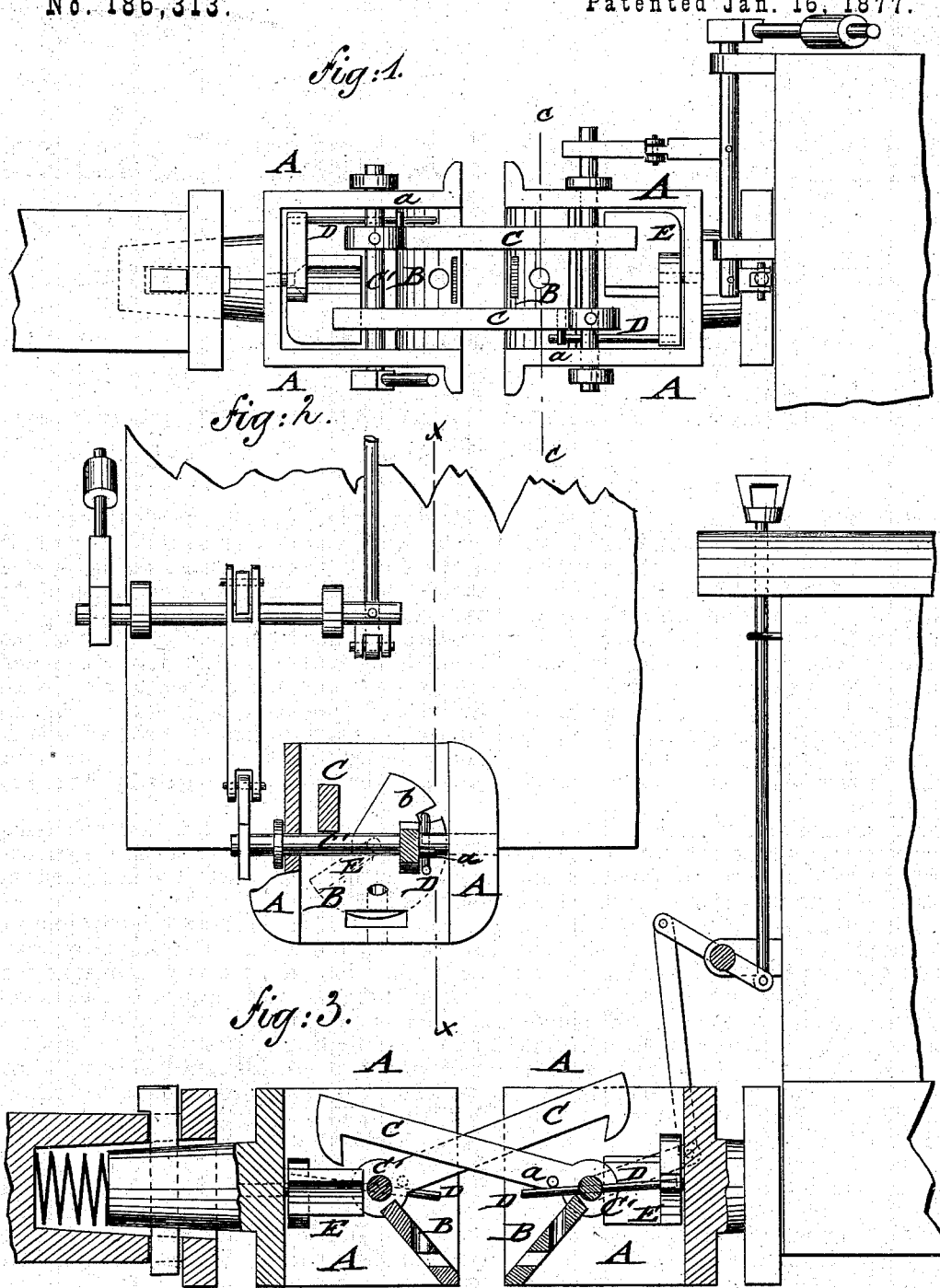


O. & M. CRUM.
CAR-COUPLING.

No. 186,313.

Patented Jan. 16, 1877.



WITNESSES:

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UNITED STATES PATENT OFFICE.

OLIVER CRUM AND MILTON CRUM, OF MONSEY, NEW YORK.

IMPROVEMENT IN CAR-COUPINGS.

Specification forming part of Letters Patent No. **186,313**, dated January 16, 1877; application filed June 6, 1876.

To all whom it may concern:

Be it known that we, OLIVER CRUM and MILTON CRUM, of Monsey, in the county of Rockland and State of New York, have invented a new Improvement in Car-Couplings, of which the following is a specification:

In the accompanying drawing, Figure 1 represents a top view; Fig. 2, a vertical transverse section on line C C, Fig. 1; and Fig. 3, a vertical longitudinal section of our improved car-coupling on line X X, Fig. 2.

Similar letters of reference indicate corresponding parts.

Our invention relates to an improved automatic car-coupling that couples in reliable manner without danger to the attendant; and it consists of a draw-head with inclined lateral locking-piece and a swinging top hook that is raised or lowered for uncoupling and coupling by a swinging bridge operated by a lever-arm of the shaft of the coupling-hook, so as to uncouple simultaneously the coupling.

In the drawing, A represents a draw-head with closed or open top, which is provided near the middle part with a lateral inclined gate or piece, B, that may be slotted and perforated to admit the coupling of the draw-head with the common pin-and-link draw-heads. A coupling-hook, C, is pivoted to a lateral shaft, C', of the draw-head above the inclined gate, to pass up on the approach of the cars along the inclined piece B of the adjoining coupling until dropping back of the upper edge of the same and locking thereto. A rod, D, passes in longitudinal direction through the shaft C' of the coupling-hook C, and engages a side lug or pin, *a*, of the same by its front end, and a recessed arm, *b*, of a

swinging bridge, E, fulcrumed to the rear end of the draw-head by its rear end. The rod D is raised or lowered by an operating lever of shaft C' from the side, platform, or top of the car, so as to raise or lower the bridge, and produce the uncoupling or coupling of the hooks C from the lateral locking-pieces. When the swinging bridge E is raised to a level with the inclined gate-piece, the hook of the adjoining coupling is freed from the gate, and simultaneously therewith the hook of the draw-head is raised from the opposite gate by the rod D and pin *a*.

The interlocking-hooks form a double reliable coupling of the cars, which has the advantage of getting readily detached in case one of the cars is thrown off the track.

The rear part of the draw-head is applied by slot, pin, and cushioning-spring to a draw-bar applied in the customary manner to the bottom of the car. The draw-head has, thereby, greater side play, and is capable of resisting more fully the concussions of the cars.

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

The combination of open-topped draw-head A, the lateral, inclined, slotted, and perforated gate B; the coupling-hook C pivoted above said gate, and having lug *a*, the shaft C', the rod D, and the bridge E fulcrumed to rear end of draw-head, all substantially as and for the purpose specified.

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Witnesses:

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