

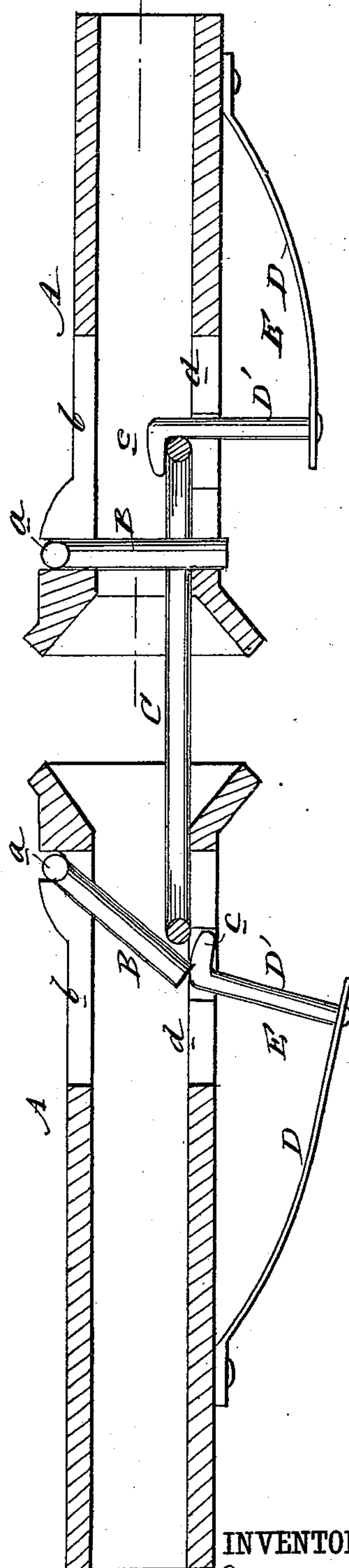
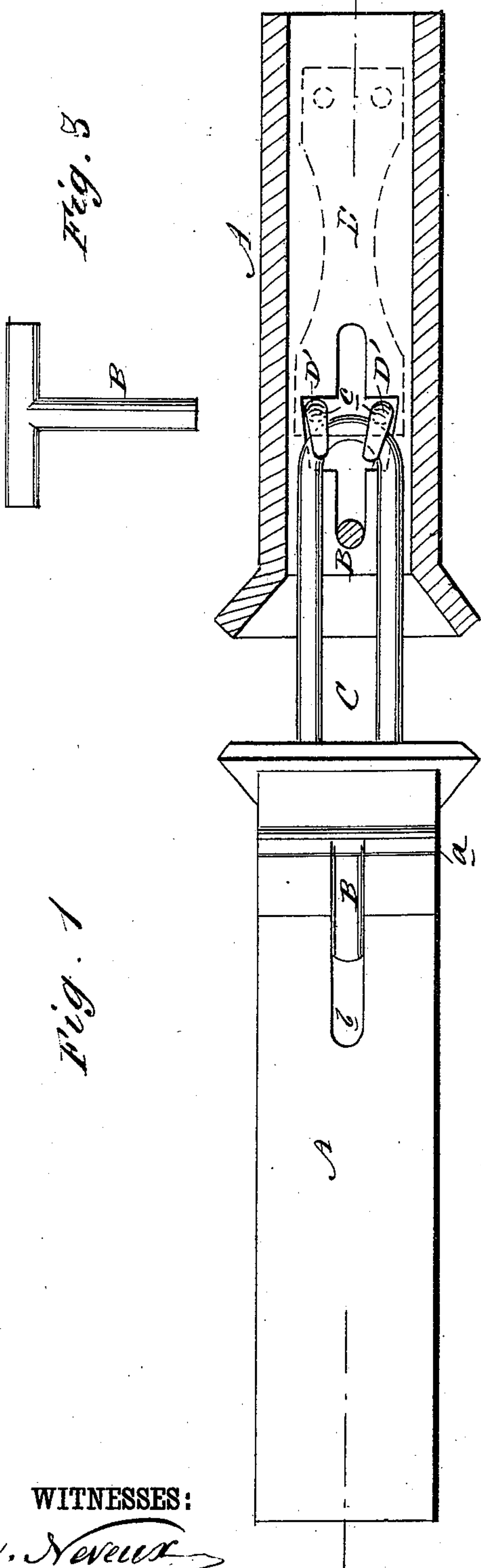
(No Model.)

M. E. MORNINGSTAR & J. W. ROBERTS.

Car Coupling.

No. 230,038.

Patented July 13, 1880.



WITNESSES:

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INVENTOR:

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UNITED STATES PATENT OFFICE.

MARTIN E. MORNINGSTAR AND JOHN W. ROBERTS, OF ARKONA, ONTARIO,
CANADA.

CAR-COUPLING.

SPECIFICATION forming part of Letters Patent No. 230,038, dated July 13, 1880.

Application filed May 31, 1880. (No model.)

To all whom it may concern:

Be it known that we, MARTIN E. MORNINGSTAR and JOHN W. ROBERTS, of Arkona, in the Province of Ontario and Dominion of Canada, have invented a new and Improved Car-Coupler, of which the following is a specification.

This invention relates to that class of devices that are called "self-couplers;" and it consists in the peculiar construction of the link-holder, as hereinafter described.

Figure 1 is a plan of the device, partly in section. Fig. 2 is a sectional side elevation of the same, showing one coupling engaged in the link and one disengaged. Fig. 3 is an elevation of a coupling-pin.

Similar letters of reference indicate corresponding parts.

In the drawings, A represents a draw-head, provided with a transverse recess, *a*, on its top, a little in rear of its mouth, and in the rear of said recess *a* with a longitudinal slot, *b*, the recess *a* being designed to hold the head of the T-shaped coupling-pin B, and the slot *b* for enabling said pin B to swing back when struck by the entering link C.

On the bottom of the draw-head A is secured a flat spring, D, that extends longitudinally forward, and has secured to its free end two vertical hooks, D', that constitute, in combination with the spring D, a link-holder, E, whose prongs *c* are bent forward at right angles to the shank of the said holder. This link-holder E is held up in the longitudinal slot *d* in the bottom of the draw-head A by means of the spring D, the function of said link-holder E being to hold the link C in a horizontal position for coupling with an opposite car.

To operate the device, the coupling-pin B is placed in position with its head resting in the recess *a* and its shank depending perpendicularly. The link C is then entered into the draw-head and pushed rearward against the pin B until said pin B lifts and, falling through said link C, assumes its primary position. Then the operator from the side of the car presses the spring D upward with one hand, and with the other hand engages the end of the link C under the prong *c* of the link-holder E, whereby said link C is firmly held in a horizontal position for coupling with another car. The opposite and free end of said link C, being entered into the opposite draw-head, strikes the coupling-pin B, so that said pin shall swing back and then drop into the said link C, and then, when the cars are drawn apart, the end of the link C that is held by the link-holder E is drawn from beneath the prongs *c*, and the said link C is then free to accommodate its movements to the motion of the cars.

By well-known mechanical devices the coupling B can be raised to uncouple the cars from either the top or sides of the car.

By means of this device the dangers to life and limb incident to going between the cars to couple or uncouple are avoided.

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

In a car-coupler, the link-holder E, consisting of spring D and hook D', substantially as herein shown, and for the purpose described.

MARTIN ELLIS MORNINGSTAR.

JOHN WILLIAM ROBERTS.

Witnesses:

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