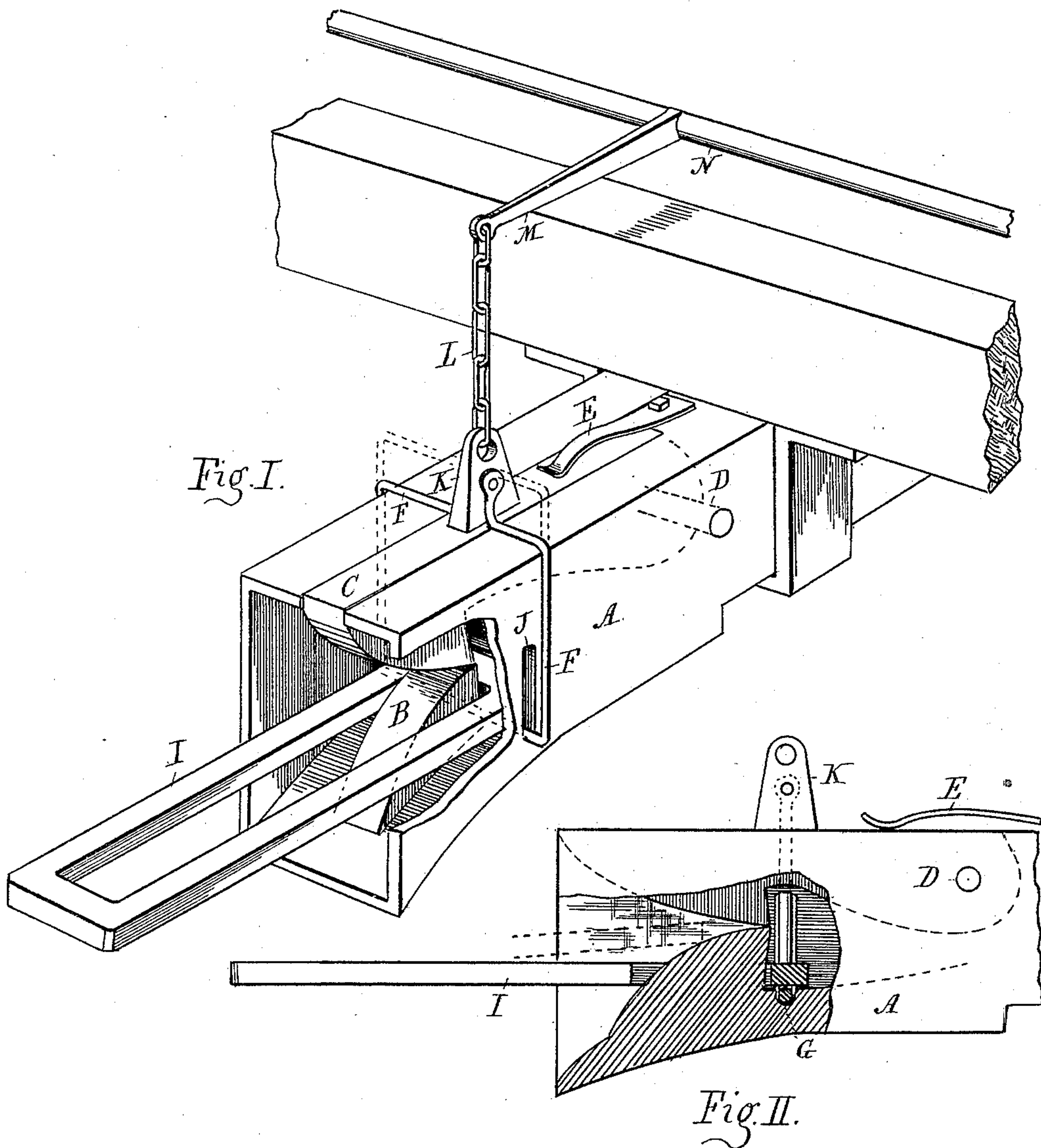


(No Model.)

J. M. CLARK.  
CAR COUPLING.

No. 421,245.

Patented Feb. 11, 1890.



WITNESSES.

Robert Kirk  
R. S. Millar

INVENTOR :

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By

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# UNITED STATES PATENT OFFICE.

JAMES M. CLARK, OF MOUNT STERLING, OHIO.

## CAR-COUPLING.

SPECIFICATION forming part of Letters Patent No. 421,245, dated February 11, 1890.

Application filed October 3, 1889. Serial No. 325,830. (No model.)

*To all whom it may concern:*

Be it known that I, JAMES M. CLARK, of Mount Sterling, in the county of Madison and State of Ohio, have invented a new and useful Improvement in Automatic Car-Couplers, which improvement is fully set forth in the following specification and accompanying drawings, in which—

Figure I is a perspective view of my improved automatic car-coupler; and Fig. II, a side view of the same, partly in section.

My invention relates to improvements in automatic car-couplers, and its object is to provide a simple, reliable, and durable device whereby the process of coupling and uncoupling cars may be easily effected without the slightest danger to life or limb of railway employees.

My invention consists of a draw-head having two vertically-disposed jaws, the lower one being integral with the draw-head, the upper one pivoted rearwardly and adapted to move vertically in a slot in the upper wall of the draw-head. A link or stirrup is suspended in the movable jaw, its lower end resting on the bottom of the draw-head immediately in the rear of the lower jaw and under the end of the coupling-link. The link and movable jaw are attached by a chain to a shaft extending across the end of the car and operated by a crank. By this means the stirrup, the coupling-link, and the upper jaw are simultaneously elevated and the coupling-link is released.

Referring to the accompanying drawings, A designates a draw-head provided with an integral lower jaw B and a movable upper jaw C, having its rear end pivoted at D. A spring E holds the upper jaw in closed position. A stirrup F engages a transverse groove G in the bottom of the draw-head directly in the rear of the stationary jaw B and beneath

the end of the coupling-link I. The side limbs of the stirrup have free movement in slots J in the side walls of the draw-head, and the upper limbs are bolted to a stud K, attached to the movable jaw C. A chain L connects the stud to an arm M on the shaft N, which is journaled on the end of the car and operated by cranks at the sides of the car. It will be understood that the chain which connects the stud K and arm M may be extended, so that the device may be easily operated by a lever or other simple appliance on the top of the car.

The downward inclination of the mouth of the draw-head is designed to facilitate the coupling of cars of different height.

The draw-head may be of the usual form and attached to the car in the ordinary manner.

What I claim as new is—

1. In an automatic car-coupler, the draw-head provided with upper and lower coupling-jaws, as described, and a vertically-movable stirrup adapted to release the coupling-link, substantially as herein set forth.

2. In an automatic car-coupler, a draw-head having a downwardly-inclined mouth and provided with upper and lower coupling-jaws and a stirrup, as described, in combination with a coupling-link, and mechanism operated by a crank or lever, adapted to elevate the movable jaw, the stirrup, and the coupling-link, substantially as herein set forth.

In testimony that I claim the foregoing I have hereunto set my hand, this 26th day of September, 1889, in the presence of two witnesses.

JAMES M. CLARK.

Witnesses:

C. R. BROWN,  
J. RECOB.