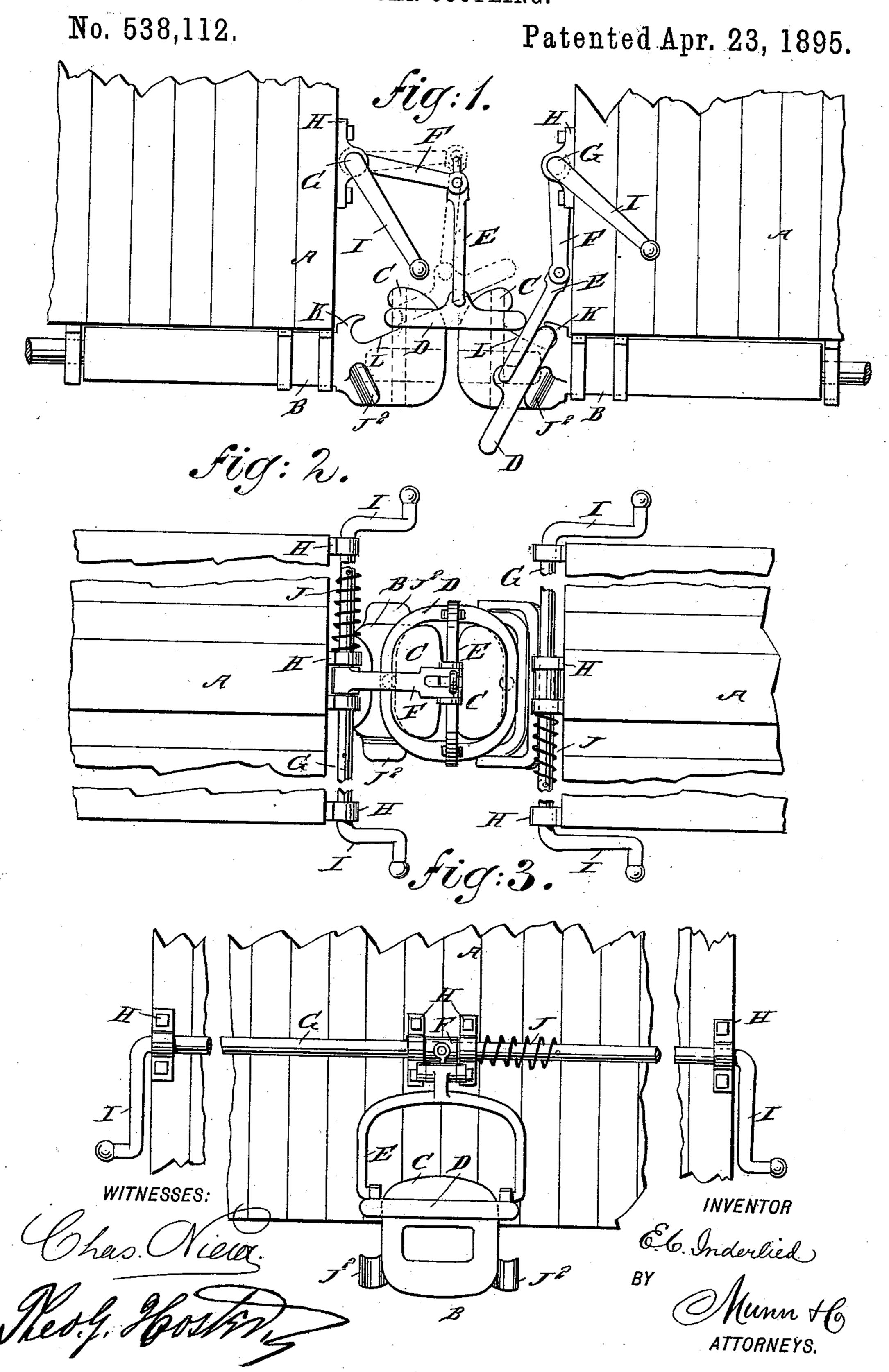
E. C. INDERLIED.
CAR COUPLING.



## UNITED STATES PATENT OFFICE.

EDWARD C. INDERLIED, OF ROCK RIFT, NEW YORK.

## CAR-COUPLING.

SPECIFICATION forming part of Letters Patent No. 538,112, dated April 23,1895.

Application filed January 23, 1895. Serial No. 535,863. (No model.)

To all whom it may concern:

Be it known that I, EDWARD C. INDERLIED, of Rock Rift, in the county of Delaware and State of New York, have invented a new and 5 Improved Car Coupling, of which the following is a full, clear, and exact description.

The invention relates to car couplings such as shown and described in the Letters Patent of the United States, No. 532,275, granted to

10 me January 8, 1895.

The object of the invention is to provide a new and improved car coupling, arranged to securely couple the cars and prevent accidental uncoupling, at the same time holding the non-engaged link of one of the cars in a proper resting position and without danger of interfering with the coupling parts.

The invention consists principally of a drawbar, provided with a forward hook and 20 a rear hook connected by an incline at its bottom with the bottom of the forward hook. The invention further consists of a drawbar, provided on its sides with inclined resting lugs adapted to support the link.

The invention consists of certain parts and details and combinations of the same, as will be fully described hereinafter and then pointed out in the claims.

Reference is to be had to the accompanying 30 drawings, forming a part of this specification, in which similar letters of reference indicate corresponding parts in all the figures.

Figure 1 is a side elevation of the improvement, showing two cars coupled. Fig. 2 is a 35 plan view of the same; and Fig. 3 is an end elevation of the improvement as applied on

one car. The car A is provided on its under side and at each end with a drawbar B formed at its 40 forward end and at the top thereof with a downwardly and slightly rearwardly curved hook C, adapted to be engaged by one end of the link D, connected at or near its middle with a U-shaped arm E pivotally connected 45 at its upper end with an arm F, projecting from the shaft G mounted to turn in suitable bearings H attached to the end of the car. Each end of the shaft G is provided with a crank arm I, extending to the side of the car 50 and under the control of the operator, to permit the latter to turn the shaft G so as to swing the arm F upward or downward, to

lift the link D out of engagement with the hooks C of the two cars to be coupled or into engagement at the time the two drawbars are 55

opposite each other.

A spring J is coiled on the shaft G and secured with one end to the shaft and its other end to one of the shaft bearings. This spring is so arranged as to become operative only 60 when the link D is raised above its normal level on top of the drawbars. The spring prevents the link from jumping out of the hooks and consequently prevents accidental uncoupling of the cars.

On each side of the drawbar B is arranged an inclined lug J<sup>2</sup>, preferably curved or recessed at its top face to form a resting place for the link D when not in use. The link then extends in an inclined, downward direction, 70 the upper end of the link being held in a hook K formed at the rear of the hook C and having its bottom connected with the bottom of the hook C by an inclined surface L, as is plainly shown in the drawings. By this ar- 75 rangement the upper end of the non-used link D is complely out of the way of the end of the link used for connecting the drawbars with each other at their hooks C. At the same time the non-used link D is held in the 80 proper position by the hook K, so that an upward sliding of the link is prevented. Thus, it will be seen that by the arrangement described a proper coupling of the drawbars can be accomplished without danger of the 85 link being accidentally displaced from the hook C, or the link interfering with or being interfered with by the non-used link of the other drawhead.

Having thus fully described my invention, 90 I claim as new and desire to secure by Letters Patent—

1. In a car coupling, the combination of a draw bar provided with two oppositely projecting hooks arranged in different horizontal 95 planes, and connected by an inclined surface and with inclined lugs on its sides, a rock shaft provided with crank arms at its ends and with an arm intermediate of its ends, a link, and a U-shaped arm pivoted to the arm roo of the rock shaft and having the ends of its members pivoted to the link at about its middle, substantially as described.

2. A car coupling, comprising a drawbar

having a hook at its forward end, a coupling link adapted to engage the hook, a connecting link adapted to engage the coupling link at opposite sides, an arm connected with said connecting link, and a spring-pressed shaft carrying the said arm and provided at its ends with crank arms extending to the sides of the car and under the control of the operator, substantially as shown and described.

having a hook at its forward end, a hook in the rear of the forward hook, and side resting lugs, a coupling link adapted to engage either

of the said hooks and adapted to rest on the said resting lugs, a connecting link attached 15 to the said coupling link at the sides thereof, an arm supporting the said connecting link, a shaft mounted to turn on the end of the car and carrying the said arm, and a spring held on the said shaft, substantially as shown 20 and described.

EDWARD C. INDERLIED.

Witnesses:
GEO. O. MEAD,
JOHN OLMSTEAD.