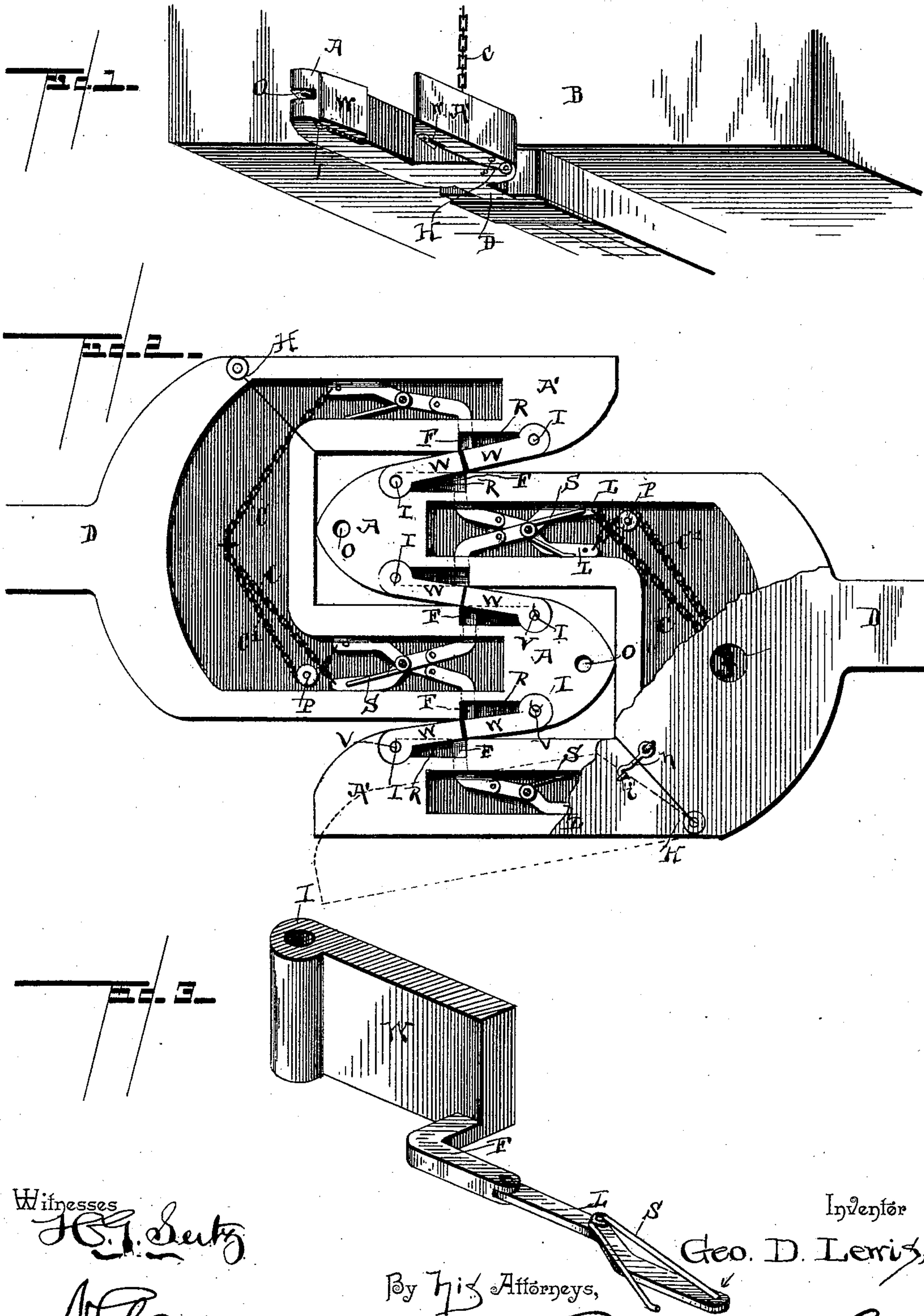


(No Model.)

G. D. LEWIS.  
CAR COUPLING.

No. 464,572.

Patented Dec. 8, 1891.



Witnesses

*J. G. Lutz*

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# UNITED STATES PATENT OFFICE.

GEORGE D. LEWIS, OF PORT ALLEGHENY, PENNSYLVANIA.

## CAR-COUPLING.

SPECIFICATION forming part of Letters Patent No. 464,572, dated December 8, 1891.

Application filed July 15, 1891. Serial No. 399,546. (No model.)

*To all whom it may concern:*

Be it known that I, GEORGE D. LEWIS, a citizen of the United States, residing at Port Allegheny, in the county of McKean and State of Pennsylvania, have invented a new and useful Car-Coupling, of which the following is a specification.

This invention relates to car-couplings of that class known as "twin-jaw," and the object thereof is to produce certain improvements in devices of this character.

To this end the invention consists in the construction hereinafter more fully described and claimed, and as illustrated on the sheet of drawings, wherein—

Figure 1 is a perspective view of the end of a car with my improved coupling attached taken slightly from the under side. Fig. 2 is a plan view of two draw-heads coupled or connected, the uppersides thereof being removed to more clearly illustrate the interior construction. Fig. 3 is an enlarged perspective detail of one wing and its operating-lever.

Referring to the said drawings, the letter B designates the body of the car, beneath which is secured the draw-bar D, whose front end or draw-head is U-shaped in plan and connected at its bend with the draw-bar. The latter stands slightly out of the transverse center of the car, so as to throw one of the arms A of the draw-head nearly in the center, while the other arm A' is quite remote therefrom. In the front end of the arm A is the usual opening O for the reception of an ordinary coupling-link when this draw-head is to be connected with one using such link. The arm A' is hinged, as at H, to the body of the draw-head, so that it can be turned outwardly, as seen in dotted lines in Fig. 2, and a hook h, pivoted to the top of the body, engages a staple or eye i in the top of the arm A' for holding it closed, when desired, although any other means for effecting this end might be employed without departing from the spirit of my invention.

To the inner face of the arm A' and to both faces of the arm A are pivoted wings W, each having eyes I at its front end mounted on a vertical pintle V and standing in a recess in the face of the arm in such manner that the front end of the wing will be flush with said face, while its rear end may move outwardly

therefrom or may sink into a recess R, and at that time the entire wing will stand flush on its outer face with the face of the arm. The wing has L-shaped feet F at its free edge, which project inwardly through openings in the face of the arm into the interior thereof which is hollow and then turn to the rear, whereby the wings are prevented from moving outwardly too far.

L is a lever centrally pivoted within the body and pivotally connected at its front end with one of the feet F, and S is a spring operating on this lever in a direction to move the wing normally out of the recess R. In the arm A there are two such levers mounted on a single pivot like a pair of shears, and of course moving oppositely in order to draw the wings simultaneously inward.

C are chains leading from the levers inwardly, and one of these chains C', which leads from the lever that operates the wing on the outer face of the arm A passes around a pulley P, as shown. The meeting ends of the chains are connected, pass upwardly through a hole in the top of the draw-head, and lead to any suitable devices (not shown) for uncoupling. With this construction of devices it will be obvious that when the two draw-heads come together, as seen in Fig. 2, the wings will spring outwardly and engage each other; and that when it is desired to uncouple the cars a pull upon the chain C will move all the levers L simultaneously, compress their springs S, and draw the several wings W into the recesses R, whereby the other draw-head would be allowed to pull out. The parts are of any desired size and material and considerable departure in the specific details may be made without losing sight of my invention. The height or vertical thickness of the draw-head may be considerable, and hence cars whose draw-heads stand at different elevations can be coupled without trouble. The arm A' can be swung out of the way whenever desired, especially when this draw-head is connected to another by the ordinary link and pin in a manner which will be clear.

What is claimed as new is—

1. In a car-coupling, the combination, with the hollow U-shaped draw-head, of wings pivotally connected at their front ends to the

arms of said draw-head, L-shaped feet on said wings passing into the draw-head, pivoted and spring-actuated levers bearing said feet and wings normally outward, and chains leading from the rear ends of said levers over suitably-located pulleys to a common point, and thence out the top of the draw-head, as and for the purpose set forth.

2. In a car-coupling, the combination, with the draw-bar, the U-shaped draw-head secured at its bend to the front end thereof, one of the arms being rigid with and the other connected by a hinge to said body, and a

catch for holding this arm normally rigid, of spring-actuated wings on both faces of the rigid arm, a single wing on the inner face of the hinged arm, and means for retracting them, as and for the purpose hereinbefore set forth.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in presence of two witnesses.

GEORGE D. LEWIS.

Witnesses:

SAMUEL W. SMITH,  
ALONZO D. LEWIS.