

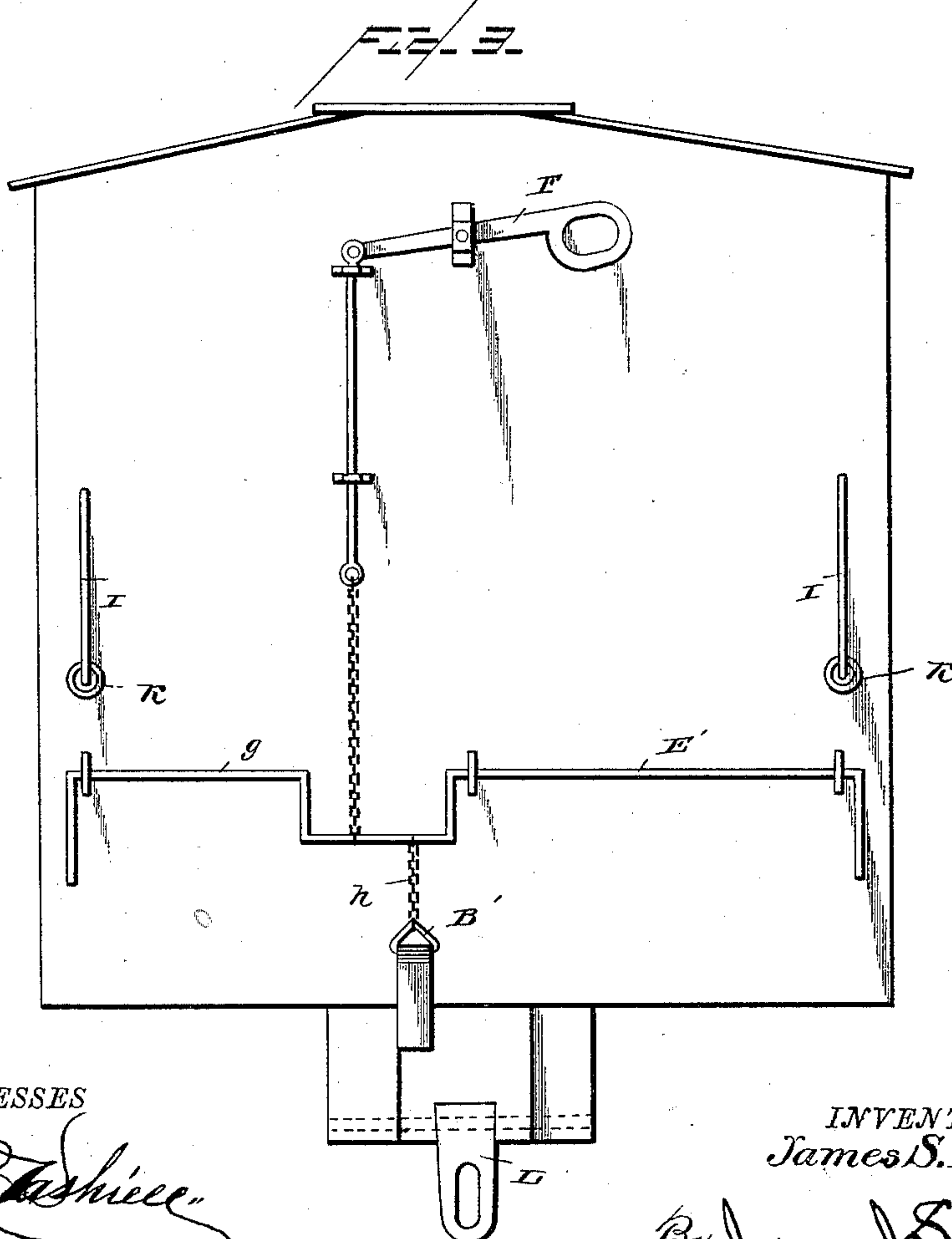
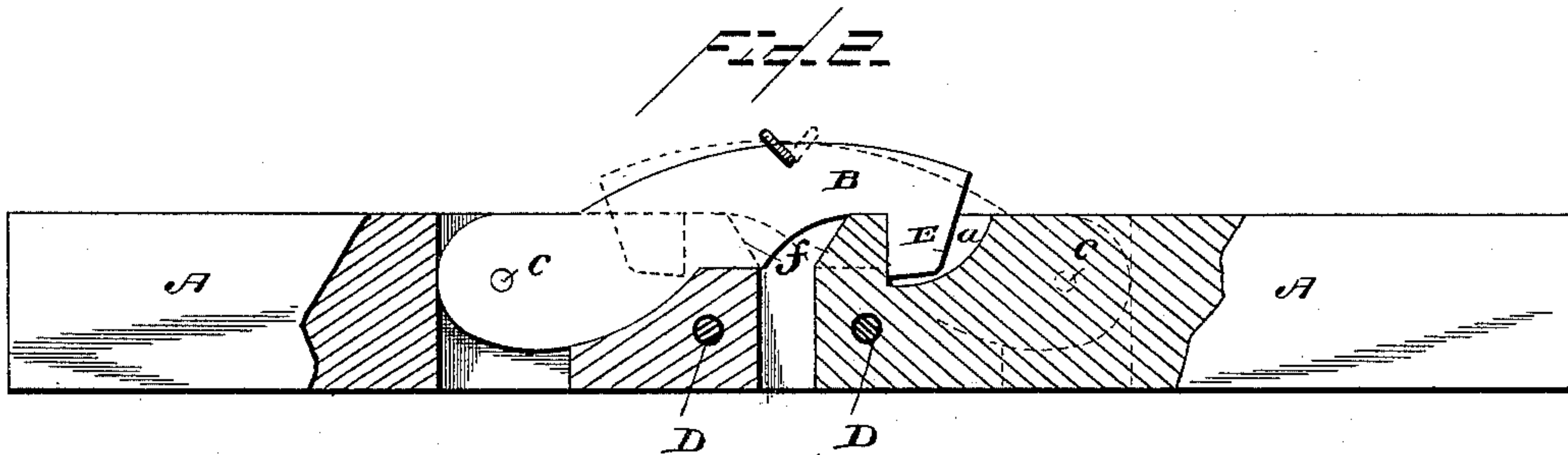
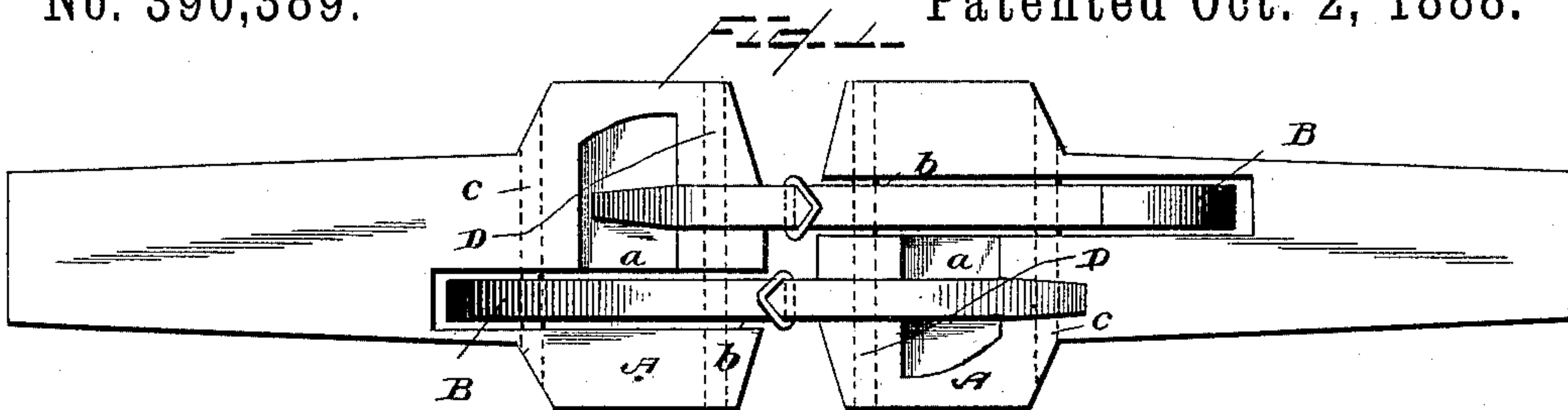
(No Model.)

J. S. MILLER.

CAR COUPLING.

No. 390,389.

Patented Oct. 2, 1888.



WITNESSES

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JAMES S. MILLER, OF BRISTOL, WISCONSIN.

CAR-COUPLING.

SPECIFICATION forming part of Letters Patent No. 390,389, dated October 2, 1888.

Application filed December 6, 1887. Serial No. 257,165. (No model.)

To all whom it may concern:

Be it known that I, JAMES S. MILLER, a citizen of the United States, residing at Bristol, in the county of Kenosha and State of Wisconsin, have invented certain new and useful Improvements in Devices for Coupling Cars, of which the following is a specification.

This invention has relation to improvements in devices for coupling cars and uncoupling the same, and the novelty will be fully understood from the following description and claim, when taken in connection with the accompanying drawings, in which—

Figure 1 is a plan view of a pair of draw-heads with my improvements applied. Fig. 2 is a longitudinal sectional view of the same; and Fig. 3 is a front view of a box-car, showing my improved means for manipulating and sustaining the coupling-links.

Referring by letter to the said drawings, A indicates draw-heads, which may be of such size at their rear ends as to be in conformity with the present construction of cars, and may be substituted for the draw-heads now in use. These draw-heads are respectively provided on their upper sides with recesses *a*, which are designed to receive the hooked ends of coupling arms or levers B. These heads are also provided with a longitudinal slot, *b*, for the reception of the pivot end of the said coupling-levers.

The coupling-levers B, which are hooked or headed at their forward and outer ends, have their opposite ends somewhat flattened or narrow, and are pivoted by means of a rod, *c*, in the slots *b* of the draw-heads. These levers have sufficient play in their slots to allow them to move vertically by devices which will be presently explained, and their hooked ends are beveled, as shown at E. The forward ends of the draw-heads are also beveled at their upper sides, as shown at *e*, so that when the cars are brought together the hooks will ride freely into the recesses of the heads, thereby forming a connection.

E' indicates a crank-shaft journaled on the front wall of a box-car, which is provided at opposite ends with hand-levers to turn the same in its bearings, and these handle portions or levers are designed to assume a position parallel with staples in the car when thrown up, as will be presently described. The crank

portion *g* of this shaft E' is connected by means of a chain with the pivoted connecting-levers B.

F indicates a foot-lever, which is pivoted about midway of its length to the front portion of the car, and at a convenient distance from the top thereof, and the said pedal or foot lever is connected at one end by means of a rod and chain with the crank portion of the lower shaft, E'. It will thus be seen that the coupling-levers may be manipulated by a person sitting upon the top of either car and working the levers with his feet without the objectionable necessity of going down or between the cars.

I indicates staples, which are of elongated form and secured in the front wall of a car at a sufficient distance above the rod or shaft E', and in a plane adjacent to that in which the handle portions of the said shaft E' move, so that when the latter have been turned up to lift the coupling-levers by means of the chain *h* they may assume a position in close relation to the said staples. These staples respectively carry a loose ring, K, which are allowed to move on the said staples, and are adapted to embrace the handle portions of the shaft E' when they have been turned upwardly, as before mentioned. This construction is particularly desirable when the cars equipped with my improvements are to be used in conjunction with cars using the common draw-head and coupling-link.

In order that the cars provided with my improvements may be used in coupling with cars of the ordinary construction without altering the construction in any manner, I have provided the heads A, in addition to the pivoted connecting-levers, with pivoted connecting-links L. These links are so pivoted in the forward under portion of the draw-head that they may be turned down out of the way when not in use, and when it is desirable to use them the coupling-levers B may be raised and held out of position by the engagement of the rings K with the handle portions of the shaft E'. By this construction it will be seen that I have a coupling and uncoupling apparatus which is very simple in construction and easy to operate and may be attached to a car of any form. It will also be seen that the cars so provided are adapted to couple with cars hav-

ing the ordinary draw-heads and coupling-links.

Having described my invention, what I claim is—

- 5 The combination, with a railway-car, of a draw-head having the recesses *a* and slotted as described, the connecting-link L, pivoted to the said draw-head, and the beveled connecting-levers B, pivoted in the said slots
10 thereof, the cranked shaft journaled in the said car and having handle portions at opposite ends, the staples secured in the cars, the rings carried thereby and adapted to embrace

the handle portions of the said crank-shaft, the pedal-lever pivoted to the front wall of the car at a short distance below its top, the lever and chain connecting the said pedal-lever with the cranked portion of the rod E', and the chain connecting the said crank portion with the connecting-lever, substantially as specified.

JAMES S. MILLER. [L. S.]

Witnesses:

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