

(No Model.)

A. G. LEONARD.
CAR COUPLING.

No. 461,839.

Patented Oct. 27, 1891.

Fig.1.

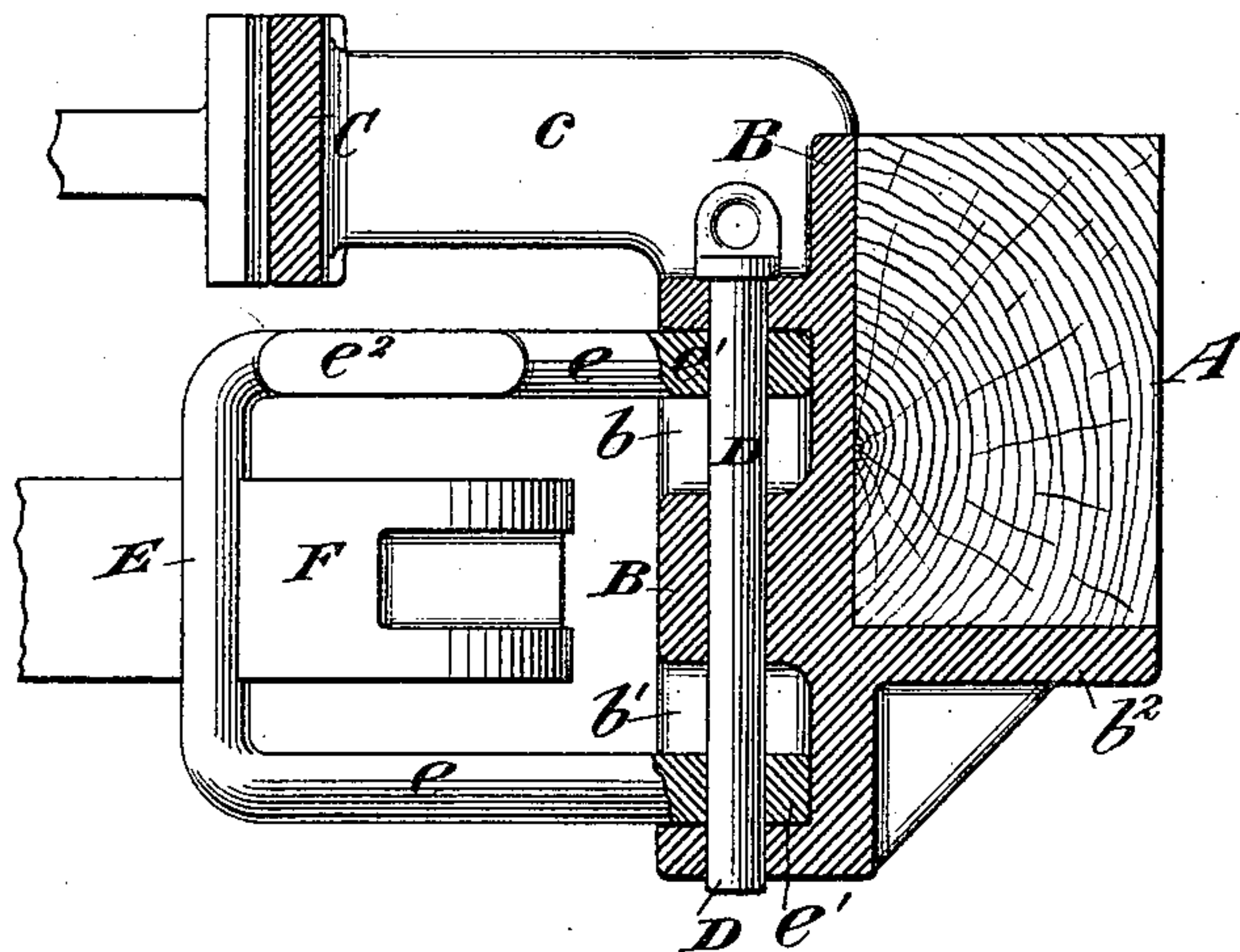
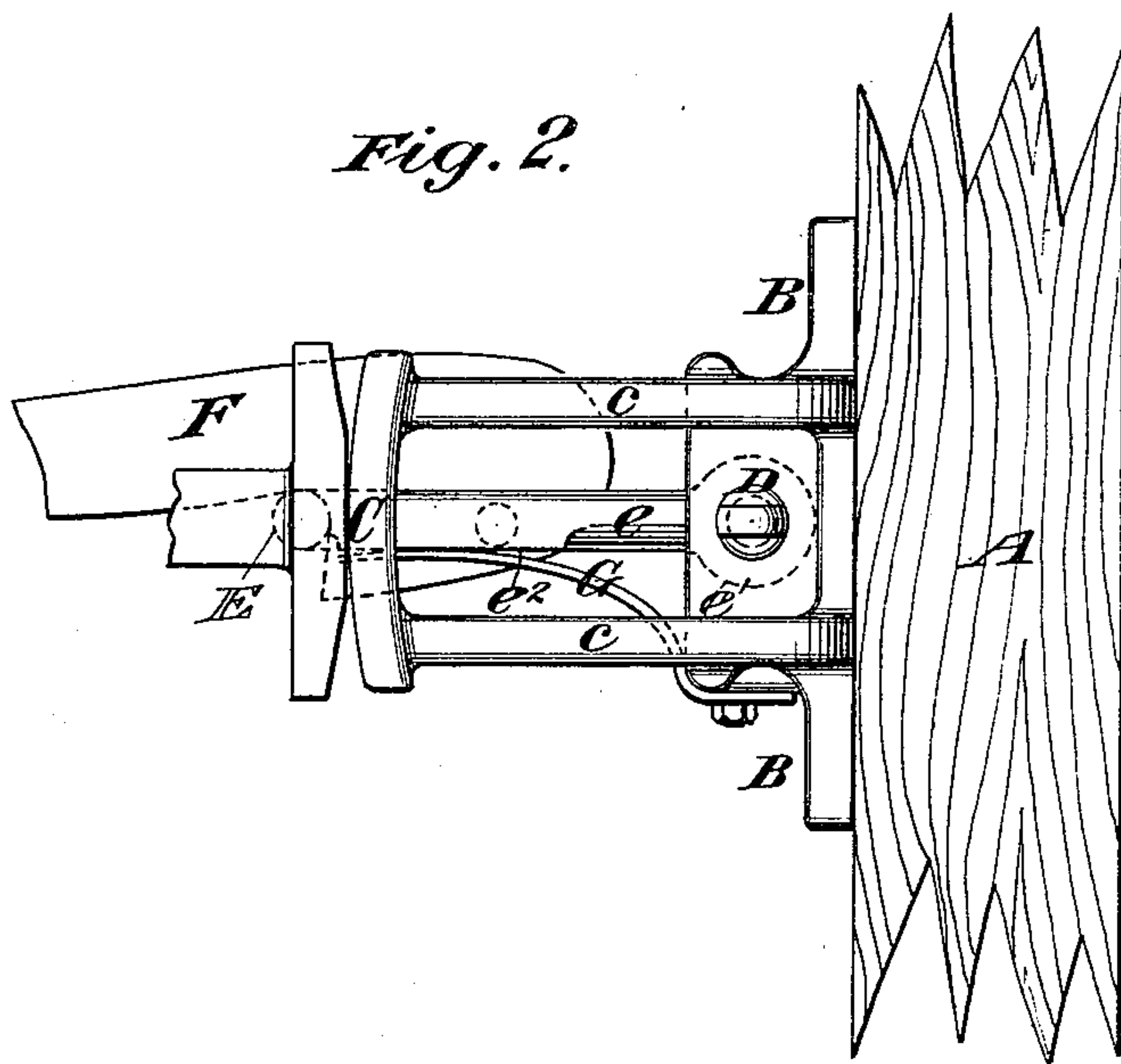


Fig. 2.



Witnesses:-
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UNITED STATES PATENT OFFICE.

ARTHUR G. LEONARD, OF NEW YORK, N. Y.

CAR-COUPLING.

SPECIFICATION forming part of Letters Patent No. 461,839, dated October 27, 1891.

Application filed March 27, 1891. Serial No. 386,641. (No model.)

To all whom it may concern:

Be it known that I, ARTHUR G. LEONARD, of the city and county of New York, in the State of New York, have invented a new and useful Improvement in Car - Couplings, of which the following is a specification.

My invention relates to an improvement in car-couplings, and more particularly to couplings adapted to couple the engine and tender to a car.

The object is to provide a simple and effective coupling which will couple automatically with cars of different heights and which may be applied to the draw-heads of the tenders in common use without requiring any considerable fitting.

A practical embodiment of my invention is represented in the accompanying drawings, in which—

Figure 1 is a view of a tender draw-head and buffer in vertical section, showing the coupling device in position thereon in side elevation, partly in section, and also showing the extreme ends of a buffer and draw-head as though attached to a car, the draw-head being represented as of the Miller type; and Fig. 2 is a plan view of the same.

A represents a portion of the end of a tender to which the draw-head B is secured, the latter being provided with recesses $b\ b'$ in its face, one above another, to receive the ends of coupling-links which have commonly been employed therewith. The head B is also provided with a buffer-head C, connected with the base-plate by arms c and with a flange b^2 , projecting under the support A. Holes are provided through the upper and lower walls of the recesses $b\ b'$ for the reception of a coupling-pin D.

In place of the links in common use I provide a U-shaped loop, the branches e of which are provided at their free ends with eyes e' , adapted to enter the upper and lower recesses $b\ b'$ in the draw-head and receive there through the coupling-pin D. When so adjusted, the loop is held with its branches extending horizontally in a vertical plane, the closed end E of the loop being in position to engage the laterally-swinging hook-shaped

head F. It is intended that the end E of the loop shall have sufficient length to accommodate the loop to the ordinary variations in the heights of cars, so as to freely admit the hook of the Miller or Janney type of coupling.

A stiff bar-spring G is fixed at one end to the side of the head B, as clearly shown in Fig. 2, its free end extending outwardly and pressing against the side of the loop, the loop being preferably provided with a flat seat e^2 for receiving it. The tension of the spring G tends to hold the loop normally swung toward the face of the hook F in position to couple, but will yield as the end E of the loop rides along the beveled face of the head F to allow the loop to engage the hook, thus rendering the coupling automatic as the tender and car approach each other. The loop may be held normally in contact with the spring G in position to couple by a light spring of ordinary form, (not shown,) or it may be so held at the time of coupling by a rod or flexible connection in the hand of the operator standing upon the tender or within reach of the connection. The loop may be disengaged from the hook either by a rod inserted between the arms c into engagement with it or by any well-known and suitable means for forcing it laterally.

The above-described coupling may be readily applied to the tenders now in use and the dangerous and clumsy means of coupling avoided.

What I claim is—

The combination, with the draw-head of a tender provided with an upper and lower socket for the reception of the common link-and-pin coupling, of a laterally-swinging open-end link having the free ends of its branches adapted to enter the sockets in the draw-head, a pin adapted to pass through the branches of the link when in the sockets, and a spring for holding the link in a position to couple, substantially set forth.

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Witnesses:

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