

(No Model.)

J. G. WAGGONER.
CAR COUPLING.

No. 486,516.

Patented Nov. 22, 1892.

Fig. 2.

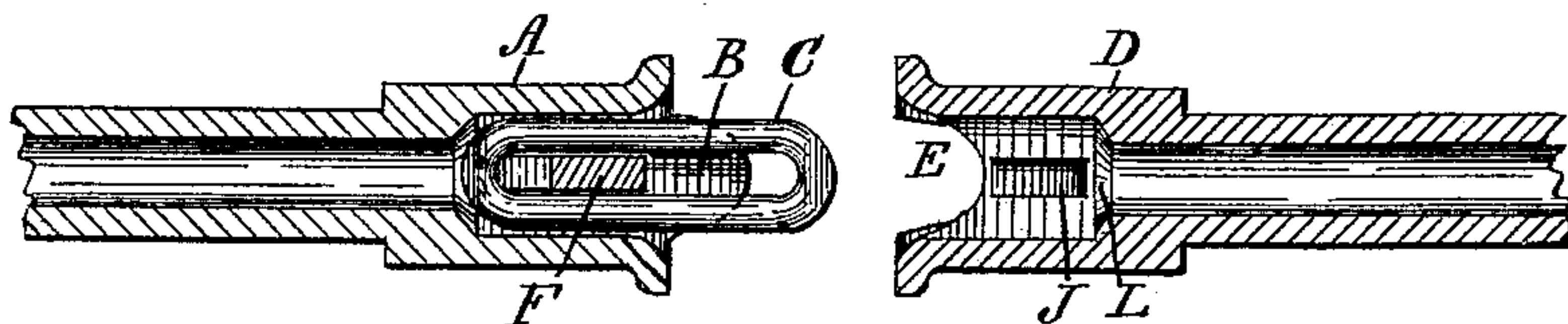
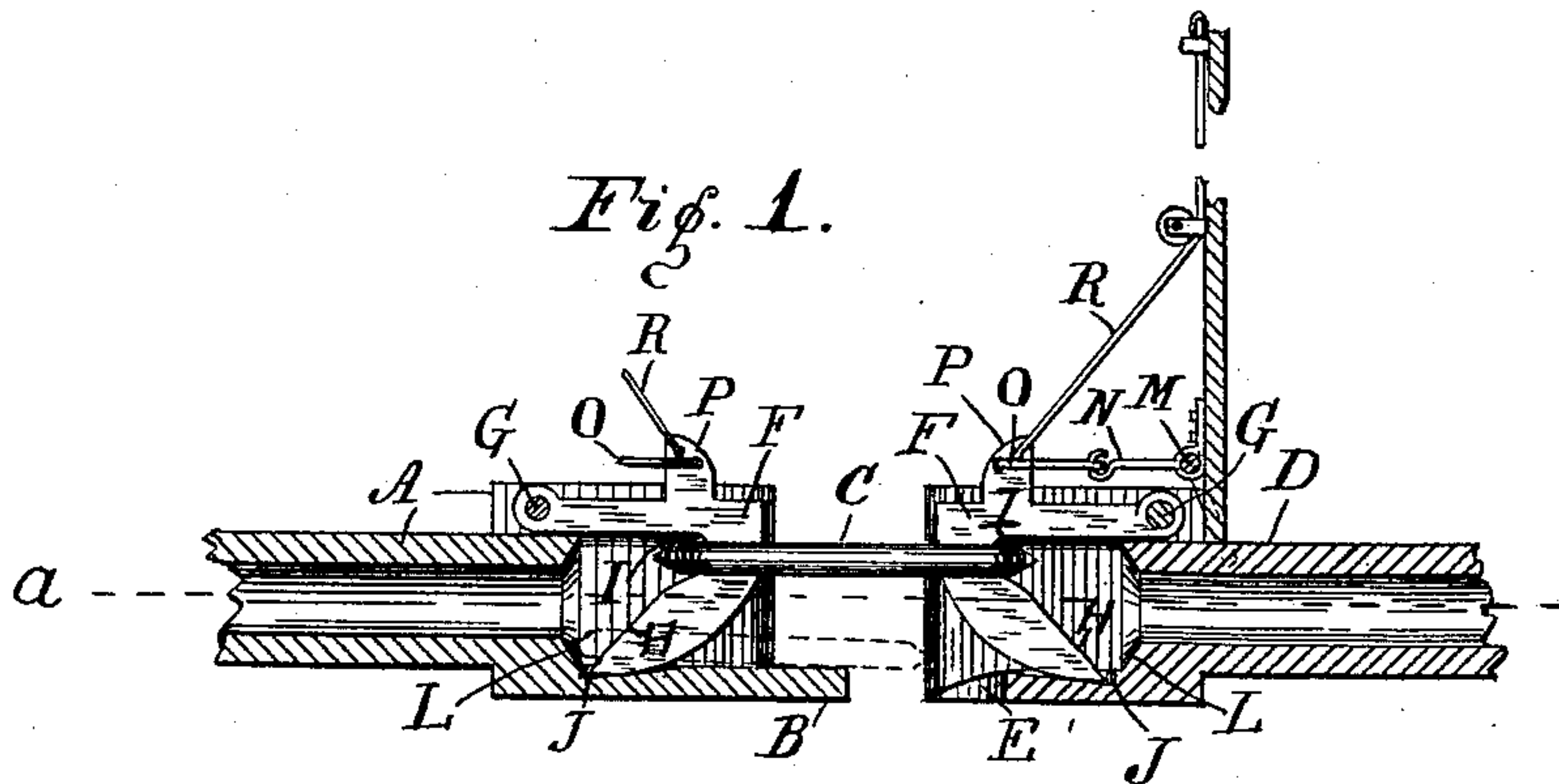


Fig. 1.



WITNESSES:

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CAR-COUPLING.

SPECIFICATION forming part of Letters Patent No. 486,516, dated November 22, 1892.

Application filed July 30, 1892. Serial No. 441,699. (No model.)

To all whom it may concern:

Be it known that I, JAMES G. WAGGONER, a citizen of the United States, residing at Columbus, in the county of Bartholomew and State of Indiana, have invented a new and useful Improvement in Car-Couplings, of which the following is a specification.

My invention relates to an improvement in that class of car-couplings in which a link is used which is engaged by hooks mounted in the opposed draw-bars.

The objects of my improvement are, first, to support the link in the draw-bar in proper position for engaging the opposed member of the coupling; second, to provide means to prevent the accidental disengagement of the link from the hooks, and, third, to provide means for holding the link in position at the strongest part of the hook when under tension. The accompanying drawings illustrate my invention.

Figure 1 represents a vertical longitudinal section of the complete coupling when coupled. Fig. 2 represents a horizontal longitudinal section at *a*, Fig. 1, showing the draw-bars in position for coupling.

In the drawings, A indicates a draw-bar closed on the sides and bottom and open at the top, the bottom being projected in front of the throat to form a shelf B, adapted to support the free end of the link C.

D is a draw-bar, like A, except that instead of the shelf B a recess E is provided in its face, which is adapted to receive the projecting shelf B of the opposed draw-bar when the opposed faces of the two draw-bars are in contact.

Hinged in the open upper side of each draw-bar is a hook F, which is pivoted to the draw-bar at G, so as to swing in a vertical plane thereon. The front end of each hook is curved downward and backward, so as to permit the easy entrance of link C beneath the hook. The rear edge of each hook is formed with a straight inclined portion H and a curved recess I. The upper surface of the bottom or floor of each of the draw-bars is provided with a recess J, adapted to receive the point of the hook below the surrounding surface, and the rear interior wall of each draw-bar is inclined backward and upward, as at L, the purpose being to raise the end of

the link by contact therewith, as shown in dotted lines, Fig. 1, and thus prevent the accidental disengagement of the hook from the link when the tension on the coupling is slackened.

For the purpose of raising the hooks F a shaft M is mounted in suitable bearings across the end of each car, said shaft being provided with a crank at each end and a central arm N, which is connected by a link O with a lug P, projecting from the upper side of the hook. For the purpose of handling the hook from the top of the car a cord or chain R is secured to lug P and extends through suitable guides to the top of the car.

In operation the link P is engaged with the hook F in draw-bar A, the free end of the link resting upon the shelf B, as shown in dotted lines, Fig. 1, and in full lines, Fig. 2. With the link in this position the face of the draw-bar A is brought in contact with the face of the draw-bar B, the hook in draw-bar B being automatically raised by the passage of the link beneath it, and the end of the link coming in contact with the incline L is raised from the floor of the draw-bar, so that a sure engagement of the link with the hook is effected. The draw-bars being then separated by the movement of the train, the link is drawn upward along the straight inclined portion of each hook until it rests in the curved recess I. In this position the strain on link and hooks is brought as nearly as possible in the line of the pivots G. Upon slackening the strain upon the link the hook may be raised at the side of the car by means of the shaft M or at the top of the car by the cord R.

I claim as my invention—

In a car-coupling, the combination of the draw-bars A and D, provided, respectively, with a shelf B and corresponding recess E, a hook mounted so as to swing in a vertical plane in the throat of each draw-bar, and a link adapted to engage said hooks, all arranged to co-operate substantially as set forth.

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Witnesses:

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