

(No Model.)

E. E. HERRINTON.

CAR COUPLING.

No. 363,636.

Patented May 24, 1887.

Fig. 1.

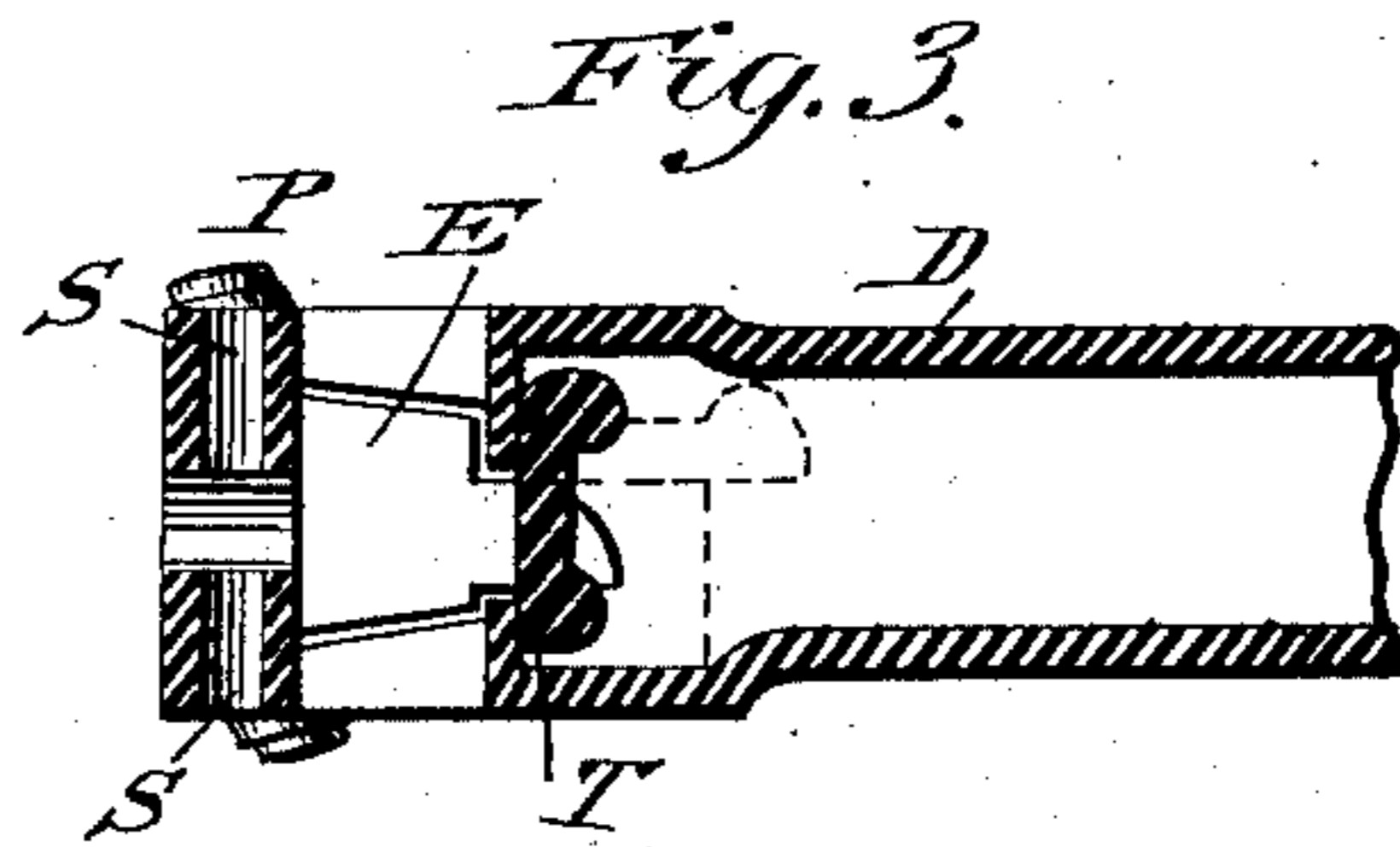
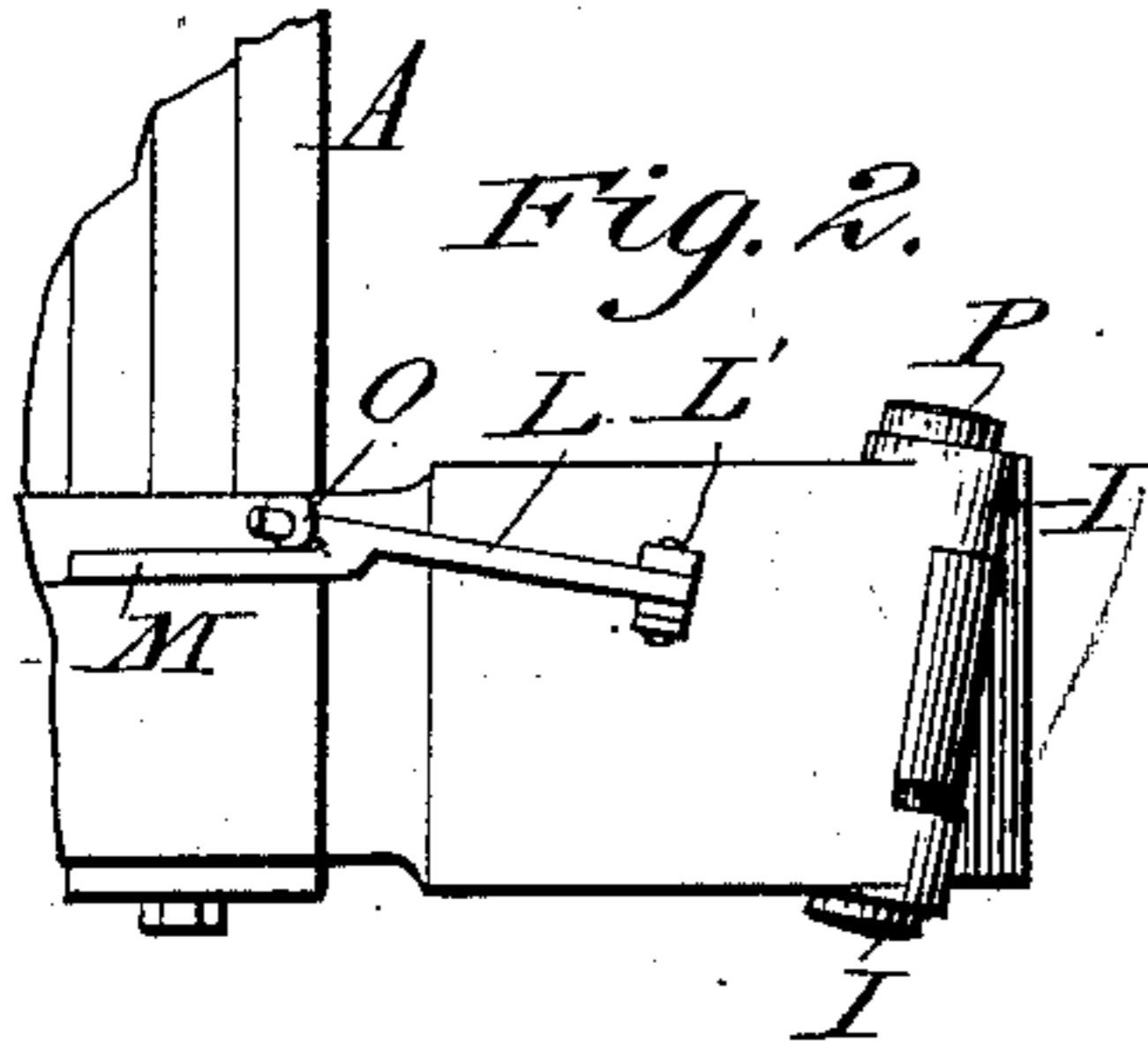
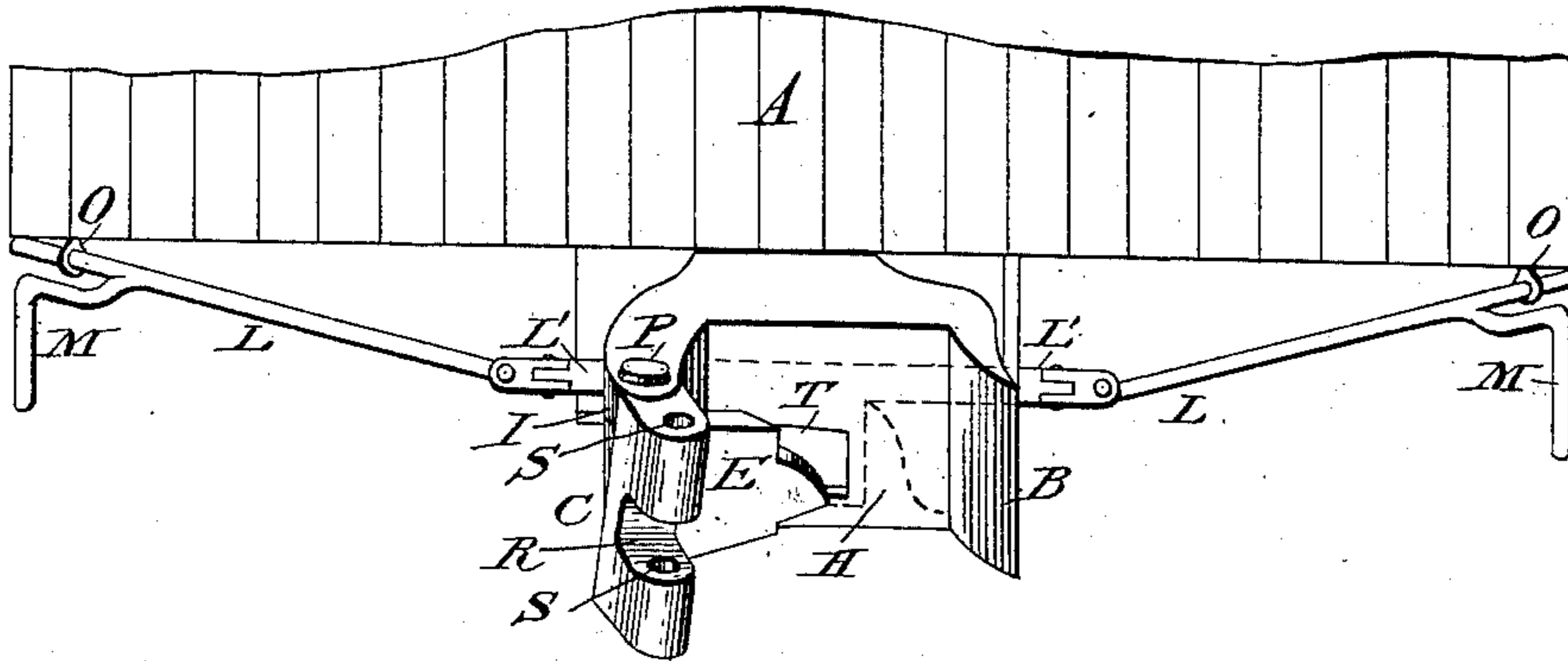
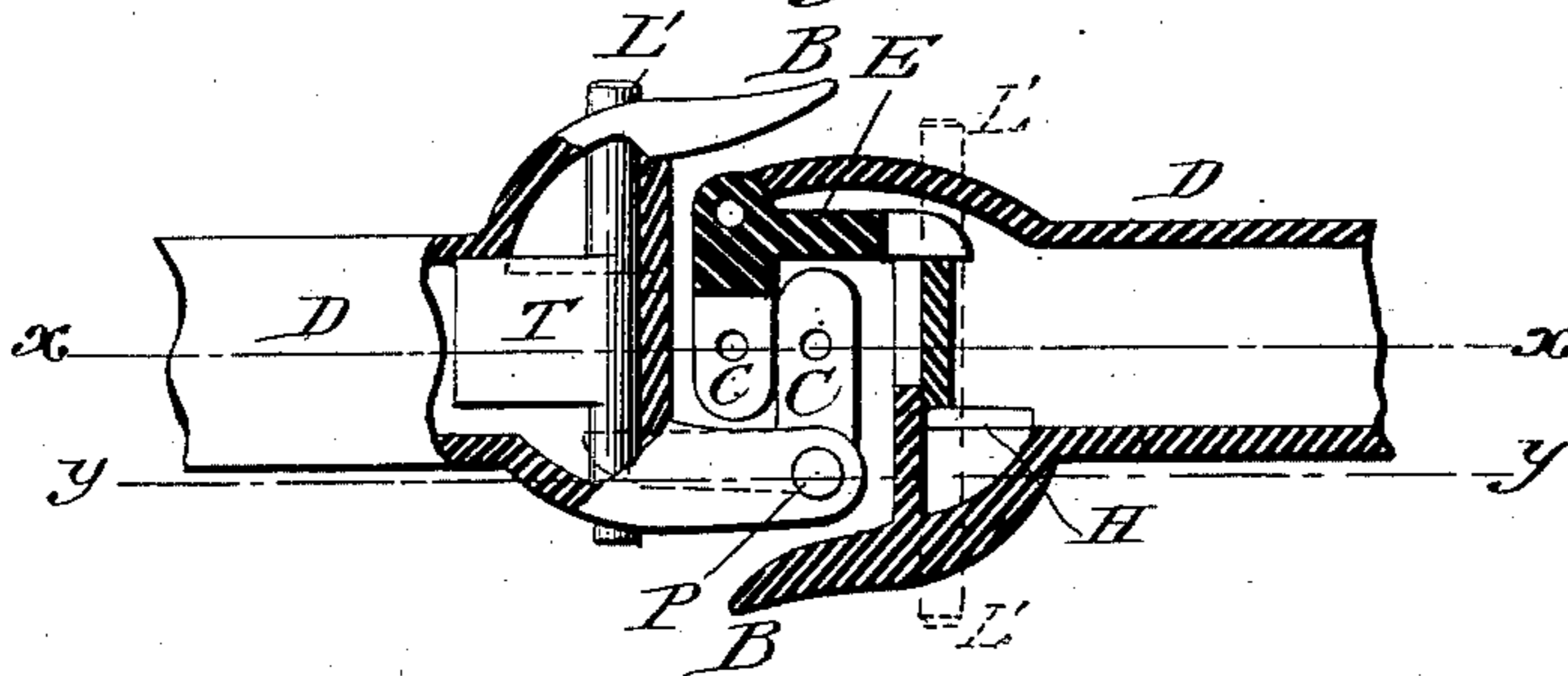


Fig. 4.



WITNESSES.

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CAR-COUPLING.

SPECIFICATION forming part of Letters Patent No. 363,636, dated May 24, 1887.

Application filed January 15, 1886. Serial No. 188,683. (No model.)

To all whom it may concern:

Be it known that I, EDWARD E. HERRINTON, a citizen of the United States, residing at the city of Grand Rapids, in the county of Kent and State of Michigan, have invented certain new and useful Improvements in Car-Couplers, of which the following is a specification.

My invention relates to that class of car-couplers which couple by means of hooks working automatically; and the object of my invention is to produce an efficient, self-acting coupler which will enable the operator to uncouple the same from the side of the cars. These objects I accomplish by means of the mechanism illustrated in the accompanying drawings, in which—

Figure 1 is an end view of a car to which my coupling is applied, showing a perspective view of the coupling-hook and its attachment to the car. Fig. 2 is a side elevation of the draw-bar and one coupling-hook. Fig. 3 is a sectional vertical view on line *xx* of Fig. 4, and Fig. 4 is a plan view of the coupling and draw-bar with the upper portions in part removed in order to show the internal structure of the coupling.

Similar letters refer to similar parts throughout the several views.

A represents a portion of the body of the car; B B, the bumper attached to the draw-bar D. One side of each bumper is provided with projecting ears I I.

C C are coupling-hooks hinged to the bumper by means of the bolt P, which bolt passes through the ears I I and the coupling-hooks C C, hinging said hook to the bumper, as shown in Figs. 1 and 4.

E is a lug or arm rigidly attached to the coupling-hook and at right angles thereto.

The bolt P, together with the bolt-holes in the ear I, and coupling-hook C are inclined, as shown in Fig. 2, which causes the coupling-hook to open automatically by its own gravity when not locked in coupling position.

T is a lock attached to the bolt or rod L', which drops down into locking position by its own gravity, as shown in Figs. 1, 3, and 4. The rod L' is supported loosely in the bumper, so that it may be readily revolved or turned

a sufficient distance to bring the lug T into position for locking the coupling-hook or for unlocking it.

L and L' are two rods attached to the rod L', as shown in Fig. 1. Each rod L is supported at one end by the hook O, and is bent so as to form the lever M at the side of the car.

The rod L' has a slight longitudinal motion, and when desirable the lock T is turned out of locking position and moved so as to rest upon the top of the lug H, where it will remain until it is pushed back and drops down.

The operation of my invention is as follows: Let the coupling-hooks be set in the position shown in Fig. 1. Then let the cars be brought together and the hook C of the other car strikes against the flange or arm E and drives it back, closing the hook attached thereto until the lock T drops down into the position shown in Figs. 3 and 4. The hook on each car acts in the same way, and both are closed and locked simultaneously and automatically. To uncouple the cars, the rod L' is turned, by means of the rod L and lever M, until the lock T is raised so as to clear the arm E, and the hook C opens by its own gravity. The uncoupling can be done with equal facility from either car or from either side of the cars.

In order to adapt my coupling device to the use of the link and pin, I cut out the recess R in the coupling-hook, as shown in Fig. 1, and provide the holes S S for the ordinary coupling-pin.

When the cars are uncoupled, the hook is held open by its gravity, so that the hooks are always in position to couple automatically whenever the cars are brought together, or, if they should become closed, can be opened from the side of the cars.

The rods L L, resting in hooks or staples O O, have a longitudinal motion therein, and in case of the breaking of the draw-bar or other accident which may detach the coupling from the cars the rods L L are withdrawn from the hooks O O without injury to the rods or any of the parts of the coupling.

Having thus described my invention, what I claim to have invented, and desire to secure by Letters Patent, is—

1. In an automatic car-coupling device, the

hinged hook C, provided with the arm E, and hinged to the bumper by means of an inclined bolt, said hook adapted to be closed and locked automatically, and when unlocked to swing
5 open by its own gravity, substantially as described.

2. In an automatic car-coupler, the combination, with a draw-head and a coupling-hook pivoted thereto, of a rod passing loosely through
10 the draw-head and a block or lock rigidly secured to said rod and adapted to be tilted rearwardly by the rod or by contact with the rearwardly-projecting portion of the coupling-hook and to fall by gravity and lock the coupling-hook in closed adjustment, substantially
15 as set forth.

3. In an automatic car-coupler, the lock T, supported on the rod L', in combination with the lug H, said rod L' and lock T adapted to
20 be raised and moved longitudinally when raised into position to rest upon the upper surface of said lug, thereby keeping said lock out of locking position, substantially as described.

4. In an automatic car-coupler, the coupling-hook C, provided with the arm E, in combination with the hinge formed by the projecting ears I I and inclined rest F and bolt P, substantially as and for the purpose described.

5. The combination of the hook C, provided with arm E, the inclined bolt P, and the lock T, adapted to drop by its gravity into locking position between the arm E and the side piece of the bumper, substantially as described.

6. The following parts in combination, viz: the coupling-hook C, provided with the arm E, the inclined bolt P, the lock T, the rod L', the lug H, the connecting-rods L L, and hooks O O, all substantially as described.

EDWARD E. HERRINTON.

Witnesses:

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EDWARD B. ESCOTT.