

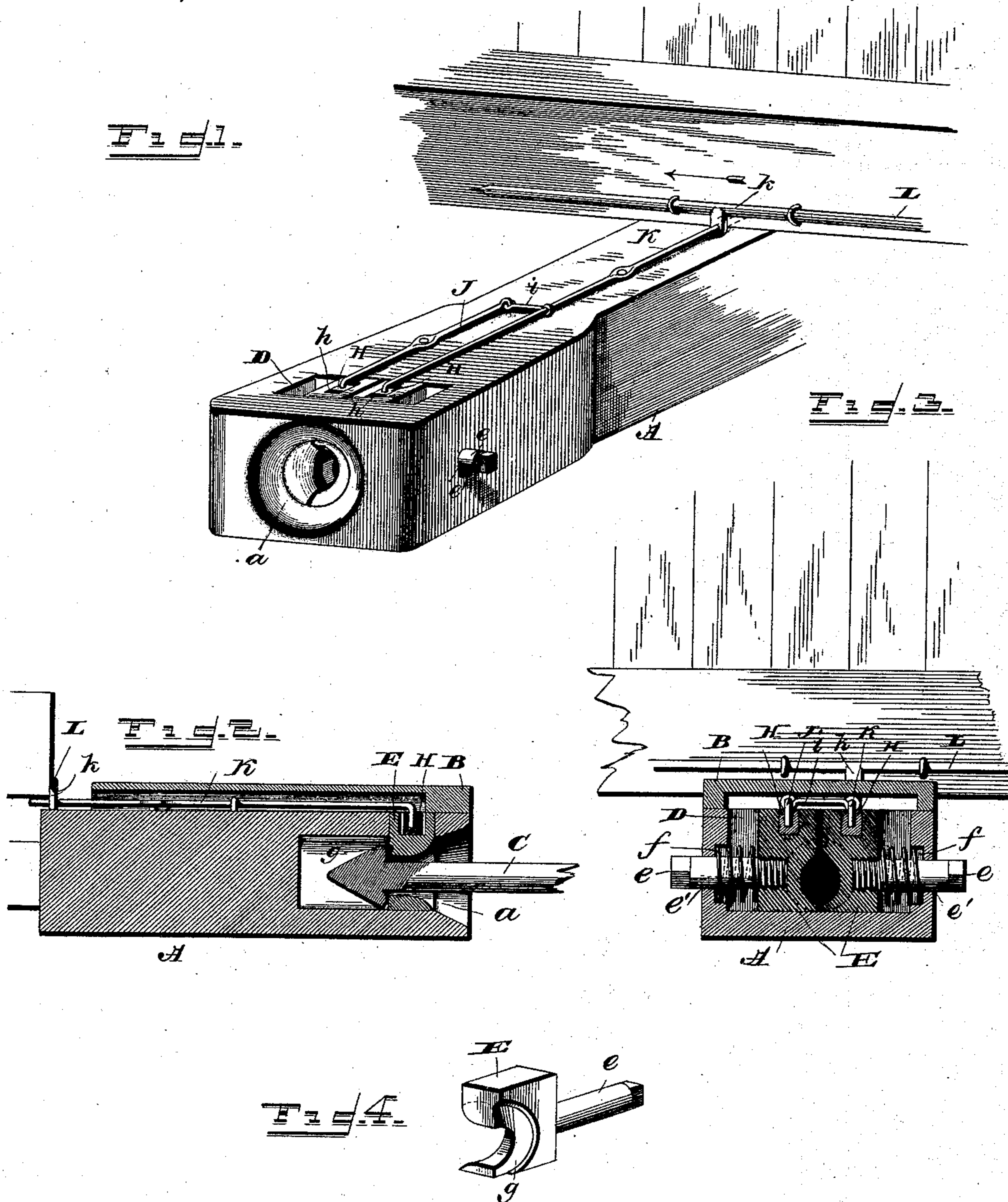
(No Model.)

E. M. & J. Q. HAMILTON.

CAR COUPLING.

No. 384,840.

Patented June 19, 1888.



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-and-

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# UNITED STATES PATENT OFFICE.

EDWARD M. HAMILTON AND JOHN Q. HAMILTON, OF RUSSELL'S PLACE, OHIO.

## CAR-COUPLING.

SPECIFICATION forming part of Letters Patent No. 384,840, dated June 19, 1888.

Application filed March 22, 1888. Serial No. 268,084. (No model.)

*To all whom it may concern:*

Be it known that we, EDWARD M. HAMILTON and JOHN Q. HAMILTON, citizens of the United States of America, residing at Russell's Place, in the county of Law and State of Ohio, have invented certain new and useful Improvements in Car-Couplers; and we do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to letters or figures of reference marked thereon, which form a part of this specification.

Our invention relates to certain new and useful improvements in car-couplers, the object thereof being to provide a car-coupler with means whereby the cars may be automatically coupled to each other and uncoupled without the necessity of going between the cars; and further consists in the construction and combination of the parts, as will be hereinafter fully set forth, and specifically pointed out in the claims.

In the accompanying drawings, which illustrate our invention, Figure 1 is a perspective view of a car-coupler constructed in accordance with our invention. Fig. 2 is a longitudinal sectional view. Fig. 3 is a vertical sectional view through the front of the draw-head, and Fig. 4 is a detail perspective view.

A refers to the draw-head, which is attached to the car frame or body in the usual manner. This draw-head A may be made of a single casting and the upper portion of the same provided with a covering-plate, B, as shown in Figs. 2 and 3 of the drawings.

The front face of the draw-head is provided with the usual bell-shaped opening, *a*, through which the conical-headed coupling-pin *C* passes, behind which is formed a recess of sufficient size to receive the head of the coupling-pin and permit the same to have sufficient play. From this recess, extending upwardly through the top of the draw-head, is another recess, *D*, for the reception of the sliding blocks *E*, which move horizontally therein. These sliding blocks are provided with projecting stems *e*, which pass through openings *e'* in the sides of the draw-head. The outer ends of these stems are key-ended, while the inner ends are screw-threaded to engage with screw-threaded re-

cesses formed in the blocks, as fully shown in Fig. 3. The stems *e* are each encircled by a spiral spring, one end bearing against the sides of the blocks, while the other enters a recess, *f*, formed in the side walls of the opening *D*. These springs serve to hold the blocks securely together, but permit the separation of the same when the conical head of the coupling-pin comes in contact with them.

The front portion of each of the blocks *E* is beveled, and they are recessed at their rear sides, as shown at *g*, to better embrace and get a better hold upon the head of the coupling-pin. The upper ends of the blocks *E* are provided with recesses *h*, within which play sliding blocks *H*, and with said sliding blocks the downwardly-bent ends of the operating-levers *J* and *K* engage. The lever *K* is pivoted on the upper side of the draw-head, and its rear end passes through an eye in a depending lug attached to the operating-bar *L*, the ends of which extend to or beyond the sides of the car.

The operating-bar *L* is suitably supported and has a sliding movement in its bearings.

The lever *J* is pivoted to the forward part of the draw-head, and is connected to the bar or lever *K* by a link, *i*. By this construction it will be observed that when the bar *L* is moved in the direction indicated by the arrow in Fig. 1, the levers *J* and *K* will be moved to separate the sliding blocks *E* and permit the link to be withdrawn.

The covering-plate *B*, hereinbefore referred to, is merely for the purpose of covering the levers.

As the lever or bar *K* slides through the depending lug, the draw-head can have a rearward spring movement without disarranging the parts.

In connection with the car-coupler hereinbefore referred to we may use a coupling-pin having a conical head, as shown, and when desired one end of the coupling-pin may be provided with a link, so that our improvement may be used in connection with a car having the ordinary draw-head.

We claim—

1. In a car-coupler, the combination of a draw-head having a longitudinal aperture therein and a top transverse slot merging into said aperture, two laterally-movable coupling-

blocks mounted in said aperture in the draw-head and having spring-encircled stems removably attached to the outer sides thereof and projecting through the sides of the draw-head and recessed in the rear and top sides, the sliding blocks, the operating-levers connected to said sliding blocks, and the link whose head engages with the rear recesses in the coupling-blocks.

10 2. In a car-coupler, the combination, substantially as described, of the draw-head, the laterally-movable spring-actuated coupling-blocks having recesses in the top thereof, sliding blocks mounted in said top recesses of the  
15 coupling-blocks, the operating levers and rods connected to said sliding blocks, and the coupling-link.

20 3. In a car-coupler, the combination, substantially as described, of the draw-head, the laterally-movable spring-actuated coupling-blocks having recesses in the top sides, the sliding blocks mounted in said top recesses of

the coupling-blocks, the long and short rod pivoted to the top of the draw-head, connected by a link, and attached at their front ends to the sliding blocks, the operating-lever to which the longer rod is attached, and the coupling-link.

4. In a car-coupler, the combination, substantially as described, of the draw-head, the laterally-movable spring-actuated coupling-blocks having sliding blocks mounted in the top thereof, and the longitudinally-arranged rods attached to the sliding blocks and unitedly operated by a lever to separate the coupling-blocks.

In testimony whereof we affix our signatures in presence of two witnesses.

EDWARD M. HAMILTON.  
JOHN Q. HAMILTON.

Witnesses:

TOM C. SMITH,  
EVA I. SMITH.