

(No Model.)

O. E. SNYDER.

CAR COUPLING.

No. 370,825.

Patented Oct. 4, 1887.

Fig. 1.

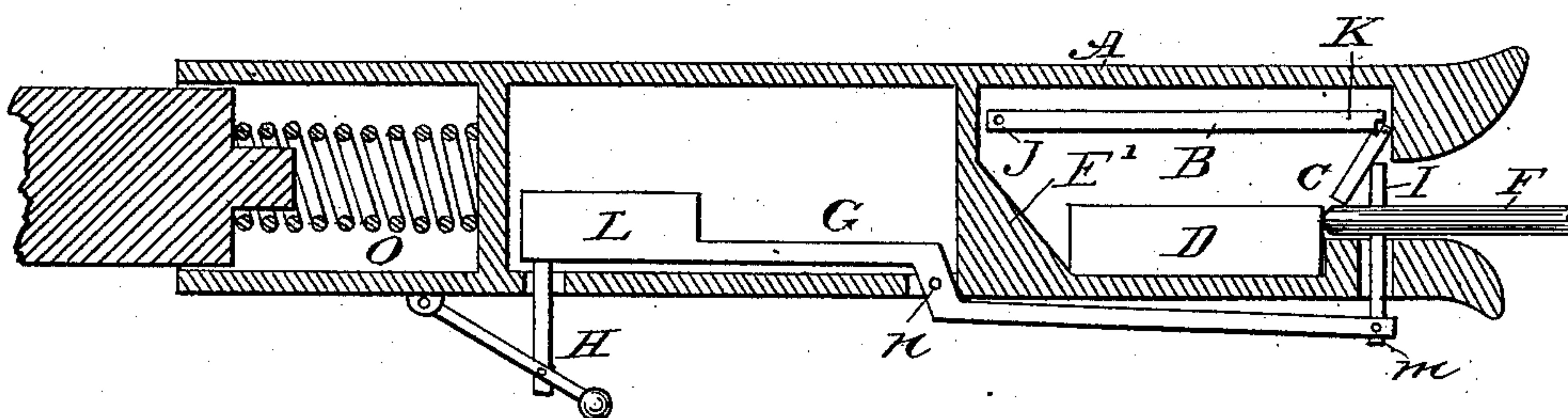
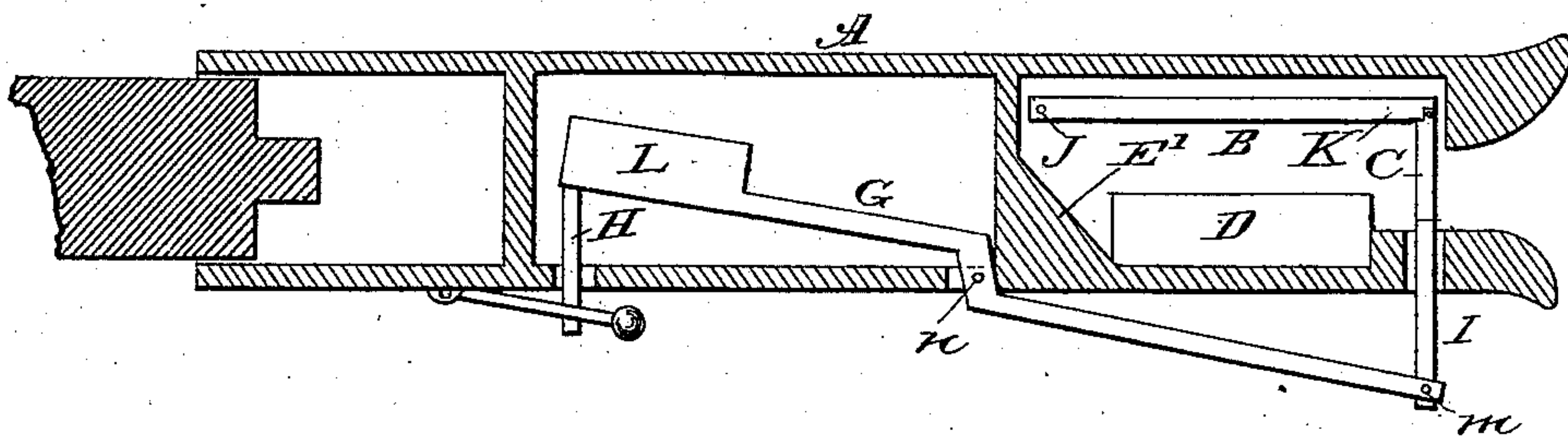


Fig. 2.



Witnesses:

E. R. Blom

C. Meriam

Inventor:

Otis E. Snyder

UNITED STATES PATENT OFFICE.

OTIS E. SNYDER, OF OTISVILLE, MICHIGAN.

CAR-COUPLING.

SPECIFICATION forming part of Letters Patent No. 370,825, dated October 4, 1887.

Application filed April 27, 1887. Serial No. 236,287. (No model.)

To all whom it may concern:

Be it known that I, OTIS E. SNYDER, a citizen of the United States, residing at Otisville, in the county of Genesee and State of Michigan, have invented a new and useful Automatic Car-Coupler, of which the following is a specification.

My invention relates to self-acting car-couplings; and the object of my invention is to provide a coupler that is sure to work and perfectly safe, and that may be uncoupled either from sides or top of car without going between the cars. I obtain these objects by the mechanism illustrated in the accompanying drawings, in which—

Figure 1 is a view of the coupler with sides removed, showing the position and workings of the different parts when a coupling is made. Fig. 2 is a view of the coupler with sides removed, showing the position and workings of the different parts when uncoupled and set ready for coupling to be made.

Similar letters refer to similar parts throughout both views.

A represents the top of the coupler.

B represents a heavy plate of iron or metal fastened with bolt at point J, resting its weight on the latch C at point K, and working freely at point J.

C represents the latch, which is forced down by its own weight and the weight of the plate B, always, when coupled, resting its lower end on top of link F, and upon raising the weight L at end of bar G, which forces the end of bar G at point *m* downward, bringing the coupling-pin I down with the end of bar G, allowing the link F to be removed and the latch C to drop down to a perpendicular position, with its lower end resting on top of the upper end of the coupling-pin I, holding it in position and set ready for coupling to be made, as represented in Fig. 2.

D represents a solid piece of movable iron or metal, which, by reason of the incline plane E, rests at all times, when coupled, against the link F, and by its weight holds the link F in position to enter the jaws of the opposite coupler, and forces the link F into the opposite coupler and makes a coupling, as represented in Fig. 1.

E represents an incline plane, upon which

the weight D is forced always against the link F when coupled, for the purpose hereinbefore mentioned.

F represents the link, which may be the ordinary link now in use.

G represents a bar of iron or metal fastened to the coupler at point *n*, working freely at point *n*, to which the coupling-pin I is attached at point *m*, and upon which a weight, L, is attached, which weight forces the end of bar G downward at which the weight is attached and the end at point *m* upward, also the coupling-pin I, and makes a coupling whenever the latch C is forced from the top of the coupling-pin I by the link of opposite coupler.

H represents a pin or bolt fastened to the bottom of bar G underneath the weight L, by means of which the weight L and end of bar G at which weight L is attached are raised by rods at sides of car, or by rods or chains at top of car, and by thus raising end of bar G at point at which the weight L is attached lowers the end of bar G at *m*, also the coupling-pin, thereby uncoupling the cars and allowing the latch C to drop in position.

I represents the coupling-pin, attached to the bar G at point *m*, and working as before described.

L represents weight attached to bar G, for the purpose as hereinbefore mentioned.

O represents spring to receive and resist the bumping of the cars.

P represents the draw-head.

I am aware that prior to my invention self-acting car-couplers have been invented. I therefore do not claim such a combination, broadly; but

What I do claim as my invention, and desire to secure by Letters Patent, is—

1. In a car-coupler, the combination of the draw-head, the link, the pivoted latch C, the incline E, the weight D, located back of said latch, and the bar G, pivoted to the draw-head, carrying the weight L at one end and the coupling-pin at the opposite end, said pin passing upward through the draw-head, engaging with the latch C, as and for the purposes specified.

2. In a car-coupler, the combination of the draw-head having the plate B pivoted at one end thereof, the latch C, pivoted in the front end,

the link, and the weighted bar G, pivoted to the draw-head, having weight at rear end and a pin at the front end, passing upward through the draw-head, as and for the purposes specified.

5 3. In a device for the purposes specified, the combination of the latch C, pivoted in the front end of the draw-head, the plate B, pivoted at J, its free end resting on latch C, the link, the

incline E, the weight D, located back of the latch, and the lever G, carrying the coupling-pin I, substantially as and for the purposes specified.

OTIS E. SNYDER.

Witnesses:

E. R. BLOOMER,
C. H. MERIAM.