(Model.)

F. RITTER.

CAR COUPLING.

No. 263,587. Patented Aug. 29, 1882.

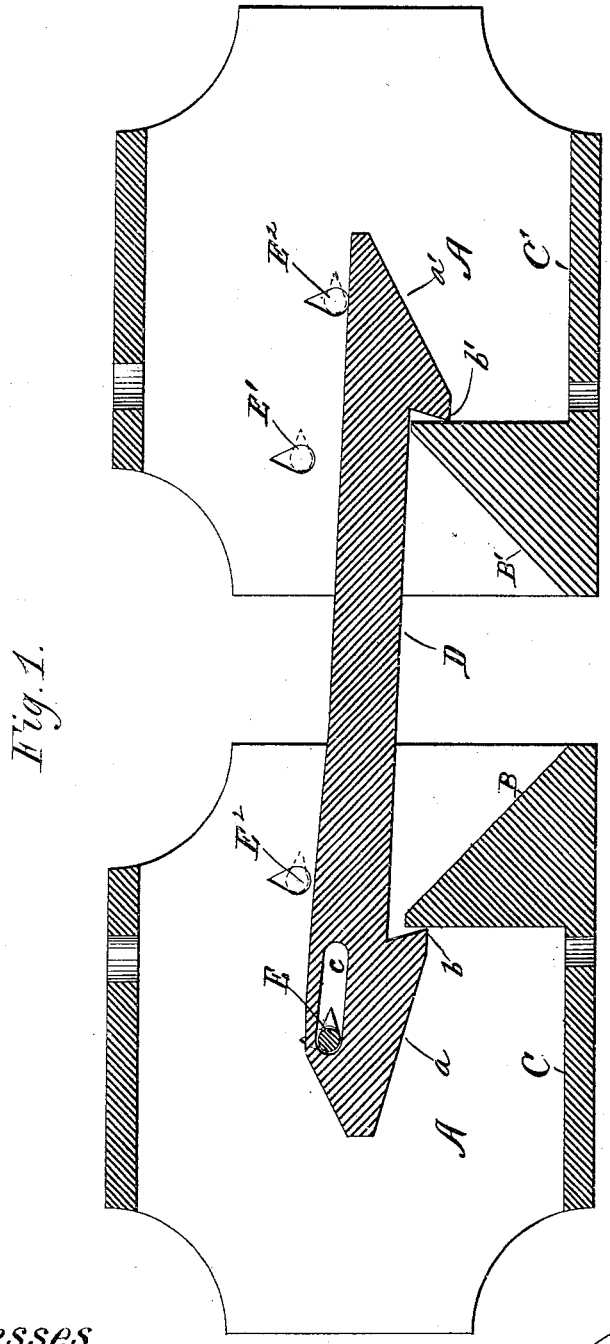

Fig. 1.

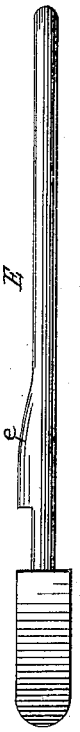

Fig. 2.

Witnesses.
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FRANCIS RITTER, OF BLAIRSTOWN, IOWA.

CAR-COUPLING.

SPECIFICATION forming part of Letters Patent No. 263,587, dated August 29, 1882.

Application filed January 23, 1882. (Model.)

To all whom it may concern:

Be it known that I, FRANCIS RITTER, of Blairstown, in the county of Benton, in the State of Iowa, have invented a new and Improved Railroad-Car Coupler and Car-Bumper; and I do hereby declare that the following is a full and exact description thereof, reference being had to the accompanying drawings, and to the letters of reference marked thereon.

My invention relates to that class of car-couplings where a double-headed draw-bar or link is employed; and the object of the said invention is to secure a coupling which is automatic in its coupling movement, and which is more efficient and effective in its operation than those heretofore employed.

Heretofore in this class of couplings, where a double-headed link has been employed, it has been usual to connect the cars by means of spring-jaws and other yielding devices which grasp and retain the heads of the draw-bars; but constructions of this character are objectionable in that they entail the use, as before stated, of springs, &c., thus increasing the liability of the device to become inoperative, owing to the springs giving way to the great strain to which they are subjected.

In the drawings forming a part of this specification, Figure 1 is a longitudinal section of two car draw-heads having my invention applied thereto. Fig. 2 is a detail view, showing one of the key-irons.

The same letters of reference refer to the same parts throughout the specification.

A A represent respectively the draw-heads of two cars, the base C C′ of each terminating in a projection or lug, B B′, the outer opposite faces of which are inclined and extend rearwardly from the front of the draw-heads.

D is the draw-bar or link, which is provided at each end with a head, *a a′*, arranged so as to form a lip, *b b′*. The head *a* has a slot, *c*, adapted to allow the passage transversely of an iron, E, manipulated from the side of the draw-head by any suitable arrangement. Each key-iron E has a fin or rib, *e*, which, when passed through the slot *c*, clear of the head, and is turned to the position shown in Fig. 1, will key the iron and prevent its withdrawal through any cause, thus insuring the retention of the head *a* in its draw-head. It will also be noted that the key-iron acts as a pivotal shaft for the draw-bar or link D.

The coupling operation is effected automatically by the movement of the two cars toward each other. The link D being held in position by the iron E, as described, the head *a′* of the link comes in contact with the inclined face or projection B′, and is in consequence of its forward movement forced upward until the lip *b′* drops over and is retained by the upper end of the said projection B′, in which position it may be retained by passing an iron, E′, similar to the key-iron E, from the side of the draw-head, and allowing said iron to bear transversely on the top of the draw-bar or link, thus preventing any vertical movement of the same.

The slot *c* in the head *a* is elongated in order to allow of the free play of the draw-heads without uncoupling the cars.

It is frequently desirable to push the cars around instead of pulling them—as, for instance, in switching movements—in which operations the desideratum is to remove the coupling-link out of the way, the movement being communicated by the contact of the draw-heads alone. To effect this the iron E′ is withdrawn, and the iron E is moved to allow the rib *e* to come within the slot of the head *a*, when the link D can be moved vertically upward, and the head *a′* can rest in any one of several positions by means of the irons E′ E², arranged at sufficient heights beneath the head to support the same.

It will be obvious that ordinary ring-links can be employed in connection with draw-heads of the before-described construction, for when the said links have passed over the projections they can be retained in place by the insertion of one of the key-irons E E′ E², which bears upon and prevents the link from moving from off the projection.

It will also be apparent that cars can be coupled together where only one of said cars is provided with my draw-head. The link can be retained in place by the pin passing vertically through the draw-head and link, the other end being secured by the key-irons, as before described.

I claim—

1. The combination, with a draw-head having a projection, B, of a draw-bar or link, D, and iron E, having a rib, *e*, and adapted to operate the coupling-link, substantially as herein shown and described.

2. The combination, with the draw-heads A A′, having the projections B B′, of the double-headed link D, having the slot *c*, and the key-iron E, having a fin or rib, *e*, substantially as set forth.

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