(No Model.)

F. M. HAZLETON.

CAR COUPLING.

No. 265,065. Patented Sept. 26, 1882.

Fig. 3.

Fig. 4.

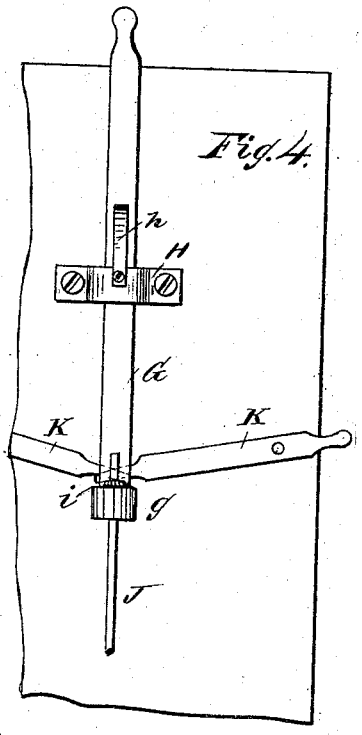


Fig. 1.

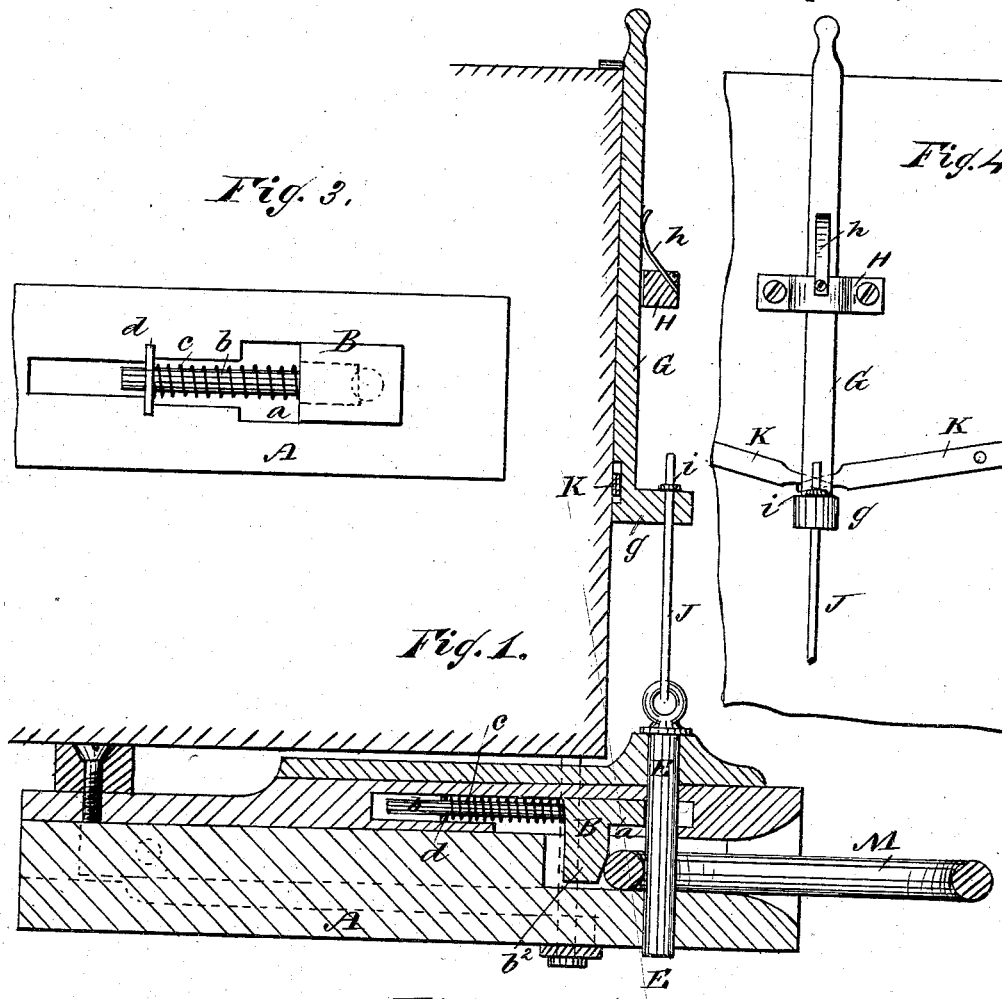
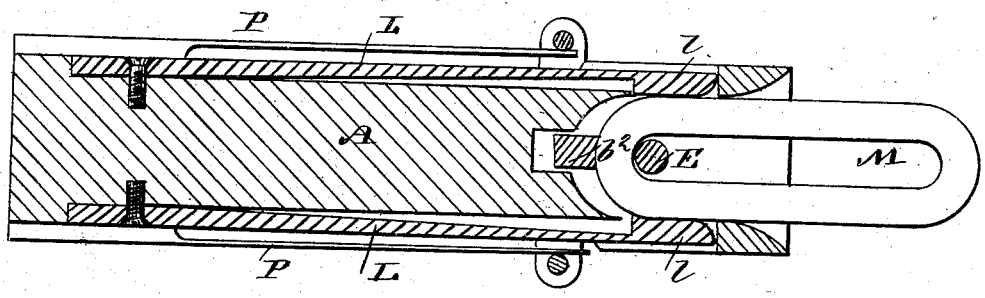


Fig. 2.



WITNESSES:

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UNITED STATES PATENT OFFICE.

FRANCIS M. HAZLETON, OF RED BLUFF, CALIFORNIA.

CAR-COUPLING.

SPECIFICATION forming part of Letters Patent No. 265,065, dated September 26, 1882.

Application filed March 11, 1882. (No model.)

To all whom it may concern:

Be it known that I, FRANCIS MARION HAZLETON, of Red Bluff, in the county of Tehama and State of California, have invented certain new and useful Improvements in Car-Couplings, of which the following is a full, clear, and exact description.

My invention consists in a novel construction and combination, with a draw-head, of a sliding block actuated by a spring for holding up the coupling-pin when uncoupled and pressing against the link and pin when coupled, a sliding bar, levers, and connections for raising and lowering the coupling-pin, a pair of springs for pressing laterally against the link to hold it in position, and certain details of construction and arrangement hereinafter more particularly described.

In the accompanying drawings, Figure 1 is a longitudinal vertical sectional view of my invention as applied to a car. Fig. 2 is a horizontal section of the draw-head. Fig. 3 is an inverted view of the pin-holder. Fig. 4 is an end view of a portion of a car provided with my improvement.

The draw-head A has its mouth flaring in the usual form to insure the entering of a link carried by a higher or lower car, and in the top and bottom of the mouth are holes for the reception of the coupling-pin. In the top of the draw-head is a recess, *a*, in which works a horizontally-sliding block, B, provided with a shank or stem, *b*, surrounded by a spring, *c*. The shank or stem *b* works in a bearing in a plate, *d*, and the ends of the spring *c* abut against this plate and against the block B with a tendency to keep said block pressed forward toward the mouth of the draw-head. The block B is guided in its rectilineal motion by the stem *b* working in the plate *d* and by the contact of its sides with the sides of the recess *a*. On the under side of the block B is a lug or stud, b^2, which projects down into the draw-head, as shown in Fig. 1. When the coupling-pin E is not in place in both holes in the draw-head the spring *c* forces the block B forward sufficiently far to cause it to obstruct the upper hole and prevent the pin from entering into the interior of the draw-head, so that the pin may be simply inserted in the upper hole, and its lower end will rest on the top of the block.

When a car carrying a coupling-link approaches to be coupled the end of the link enters the mouth of the draw-head and strikes the lug or stud b^2 on the block B, forcing it backward, so as to leave the hole free and allow the pin to drop of its own weight to the position shown in Fig. 1.

Any ordinary coupling-pin may be used in connection with this draw-head and block by simply placing the pin in position by hand. I prefer, however, to use the devices which will now be described, reference being had particularly to Figs. 1 and 4, in which G represents a rod or bar arranged to work vertically against the end of the car, or against a board or frame carried thereby, and secured by a keeper, H, provided with a pressure-spring, *h*, bearing against the bar G. At the lower end of the bar G is a horizontal arm or lug, *g*, through which works a rod, J, provided with a nut or collar, *i*, above said arm or lug, and having its lower end connected to the coupling-pin E. The bar G may be operated from the top of the car by means of a handle at its upper end, or from either side of the car by means of levers K K, having their inner ends connected with the bar. When the bar is raised the pin E is withdrawn sufficiently to allow the block B to slide under its lower end and hold it in position for coupling. The bar G is then lowered again, so as to allow the rod J to slide through the arm *g* and the pin E to drop of its own weight when the block B is again forced back.

On each side of the draw-head is a flat spring, L, at the free end of which is a projection, *l*, extending through an opening into the mouth of the draw-head, so as to bear against the link when in place.

The advantages of my invention are: The pin can be raised and lowered from the top or either side of the car without the necessity for going between the cars, and the pin is held in such a position that the link in the opposite draw-head of the approaching train releases the pin and couples the cars. The two springs L L hold the link in a straight line with the draw-head, but allow it to oscillate when going around a curve. The lug or stud b^2 on the block B, actuated by the spring *c*, keeps the link M pressed against the pin E, and thus prevents it from jolting out of place.

Having thus fully described my invention,

what I claim as new, and desire to secure by Letters Patent, is—

1. In a car-coupling, the combination, with the draw-head A, provided with the recess *a*, the coupling-pin E, and the link M, of the sliding block B, provided with the downwardly-projecting lug b^2 and a rearwardly-projecting stem, *b*, the spring *c*, surrounding the said stem, and the plate or abutment *d*, contained in the said recess, substantially as herein shown and described, whereby the link-pin is supported when uncoupled and prevented from jolting out of place when coupled, as set forth.

2. In a car-coupling, the combination, with the draw-head A and the coupling-link M, of the spring-actuated sliding block B, provided with the downwardly-projecting lug b^2 and the side springs, L, provided with the projections *l*, substantially as and for the purpose set forth.

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Witnesses:
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