

(No Model.)

T. H. & E. V. SNYDER.

CAR COUPLING.

No. 356,428.

Patented Jan. 18, 1887.

Fig. 1.

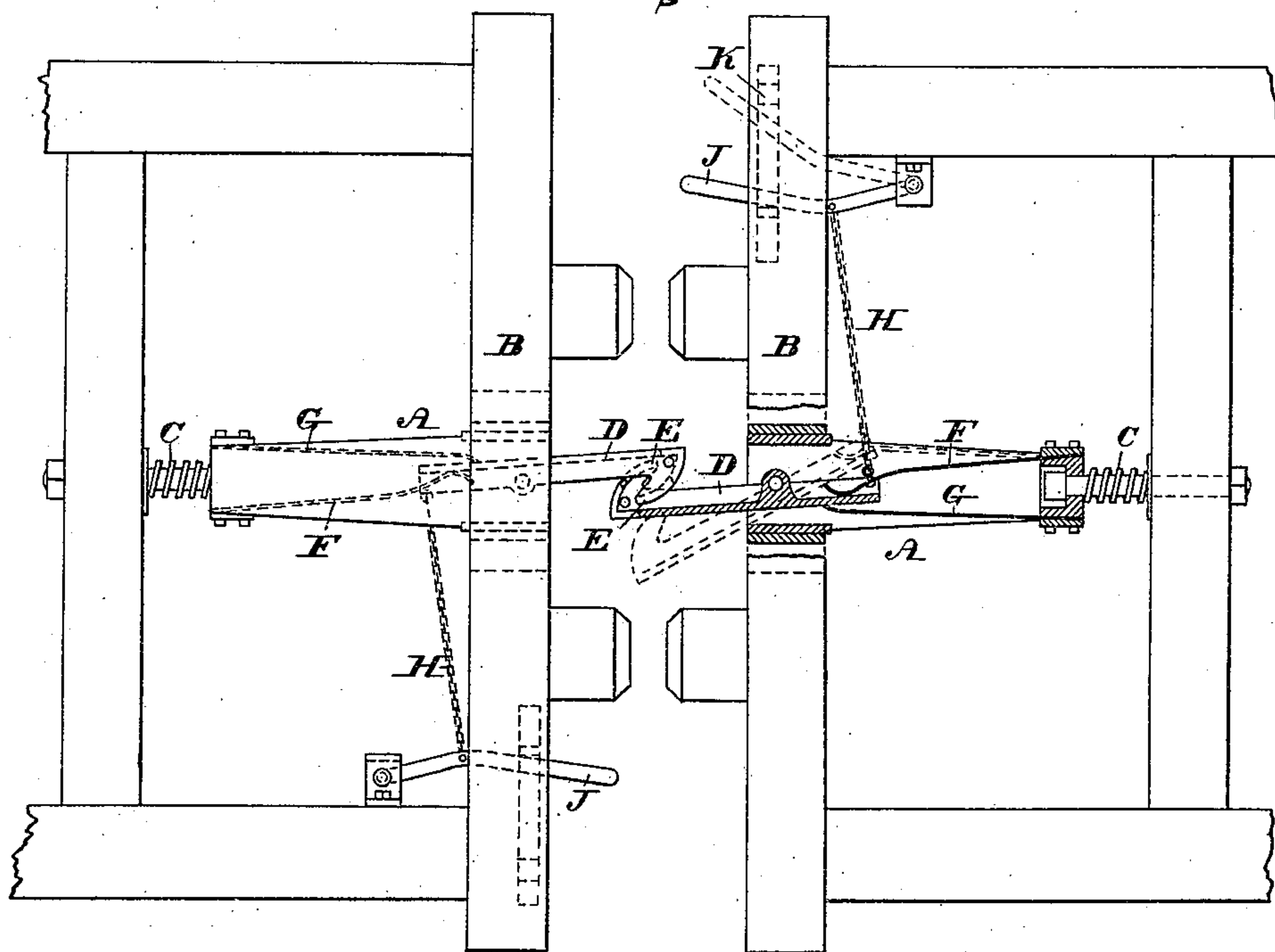
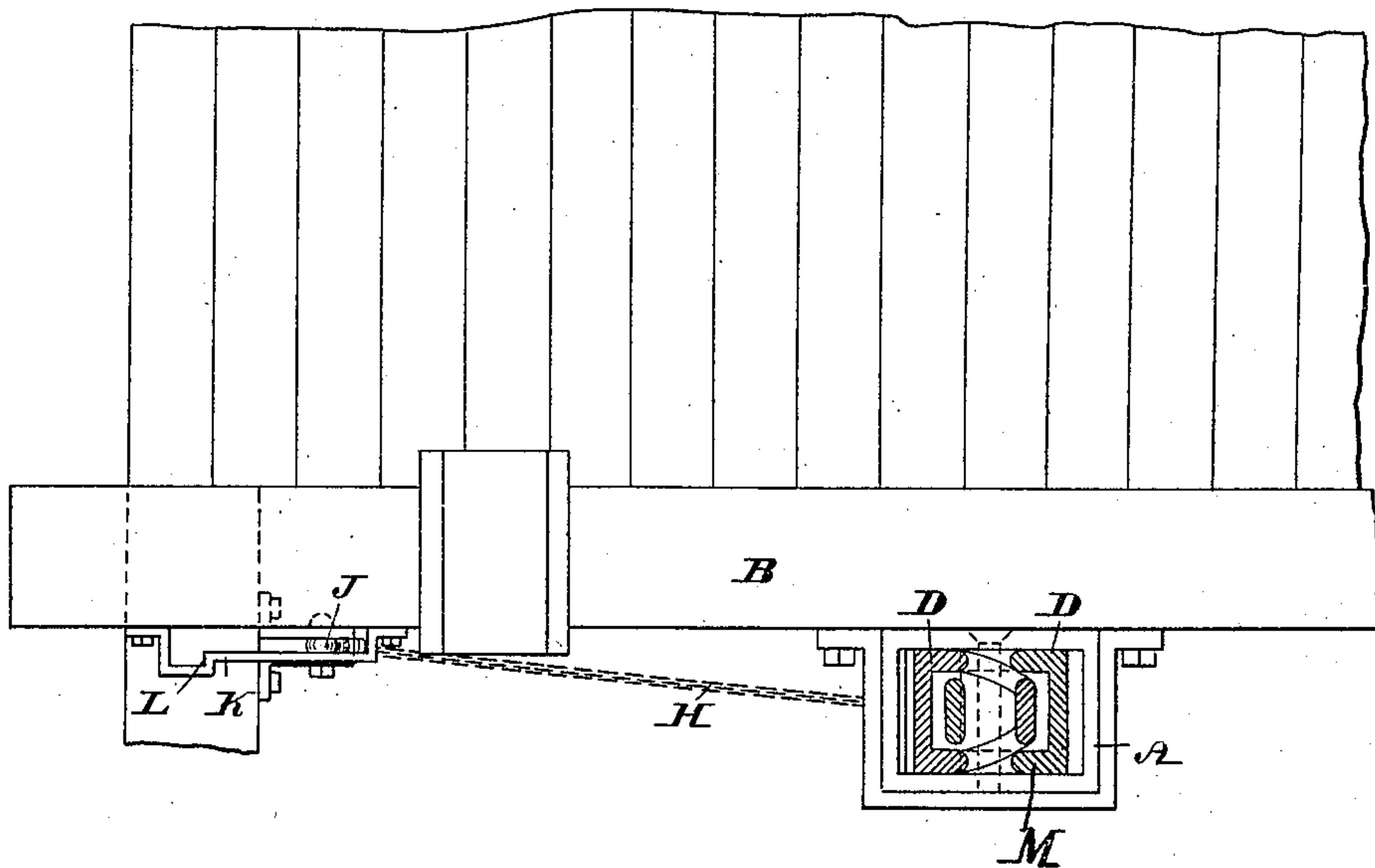


Fig. 2.



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# UNITED STATES PATENT OFFICE.

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## CAR-COUPLING.

SPECIFICATION forming part of Letters Patent No. 356,428, dated January 18, 1887.

Application filed November 12 1886. Serial No. 218,666. (No model.)

*To all whom it may concern:*

Be it known that we, THEODORE H. SNYDER and EDWIN V. SNYDER, both citizens of the United States, residing in the city and county of Philadelphia, State of Pennsylvania, have invented a new and useful Improvement in Car-Couplings, which improvement is fully set forth in the following specification and accompanying drawings, in which—

Figure 1 represents a partial top or plan view and partial horizontal section of a car-coupling embodying our invention. Fig. 2 represents a partial front and partial vertical section thereof on an enlarged scale.

Similar letters of reference indicate corresponding parts in the two figures.

Our invention consists of a coupling-bar which is pivoted to the draw-head and pressed by springs in opposite directions, whereby a car may be automatically coupled and readily uncoupled, as will be hereinafter fully set forth.

It also consists of the construction of the coupling-bar, whereby uncoupling is prevented, as will be hereinafter set forth.

It also consists of means for disengaging the coupling-bars and holding them in uncoupled position, as will be hereinafter fully set forth.

Referring to the drawings, A represents draw-heads, which are fitted to and slide in the bumpers B, and bear against the springs C, after the manner of draw-heads in general use.

Pivoted to the draw-heads are coupling-bars D, which project outwardly from said heads, and have inclined or rounded noses E, which interlock, as is well known in car-couplers of this class. Bearing against opposite sides of the inner or heel end of each coupling-bar are springs F G, which are secured to the draw-head, the spring F being superior in pressure to the spring G. Connected with the spring F is a cord or chain, H, which is attached to a lever, J, the latter being pivoted to the side of the bumper, so as to be conveniently reached and movable in a keeper, K, which is secured to the bumper and provided with a shoulder, L, for locking said lever when the bar D is in uncoupled position.

It will be seen that the cars are coupled, as shown in Fig. 1, in which position of parts therein the noses of the bars D interlock, they being held together by the action of the su-

perior springs F, said bars being, however, permitted to oscillate, due to the swaying motions of the cars, both springs F and G yielding during said motions.

When it is desired to uncouple the cars, they being sufficiently close to permit the shoulders or backs of the noses of the bars D to clear each other when moved laterally, the levers J, one or both, are operated, whereby they withdraw the springs F from the coupling-bars. The springs G then immediately control the inner ends of said bars and force the outer ends thereof from each other, thus separating said bars and automatically uncoupling the cars.

When the cars are coupled, it is desirable to prevent the bars D from disconnection by the vertical motions of the cars. For this purpose the inner sides of said bars are formed with flanges M, which extend horizontally and longitudinally along said sides, and form channels to receive the ends of the noses of the bars, said noses, as is evident, being somewhat reduced to enter said channels, and as they are embraced by the flanges, they are prevented from vertical displacement, said noses being also rounded, so as to roll while in contact with the sides of the opposite bars.

Having thus described our invention, what we claim as new, and desire to secure by Letters Patent, is—

1. A car-coupling having a pivoted bar with springs bearing laterally against the same in opposite directions, one of said springs being superior or of greater action than the other spring, substantially as described.

2. A car-coupling having a coupling-bar pivoted to the draw-head, springs bearing laterally against said bar in opposite directions, and a chain attached to one of said springs for moving the latter, whereby the other spring automatically operates the bar and uncouples the car, substantially as described.

3. A coupling-bar having a nose and side flanges, the latter guarding the top and bottom of the nose of the opposite bar, substantially as described.

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