(No Model.)

S. T. GRIMMETT.

CAR COUPLING.

No. 395,437. Patented Jan. 1, 1889.

Fig. 1.

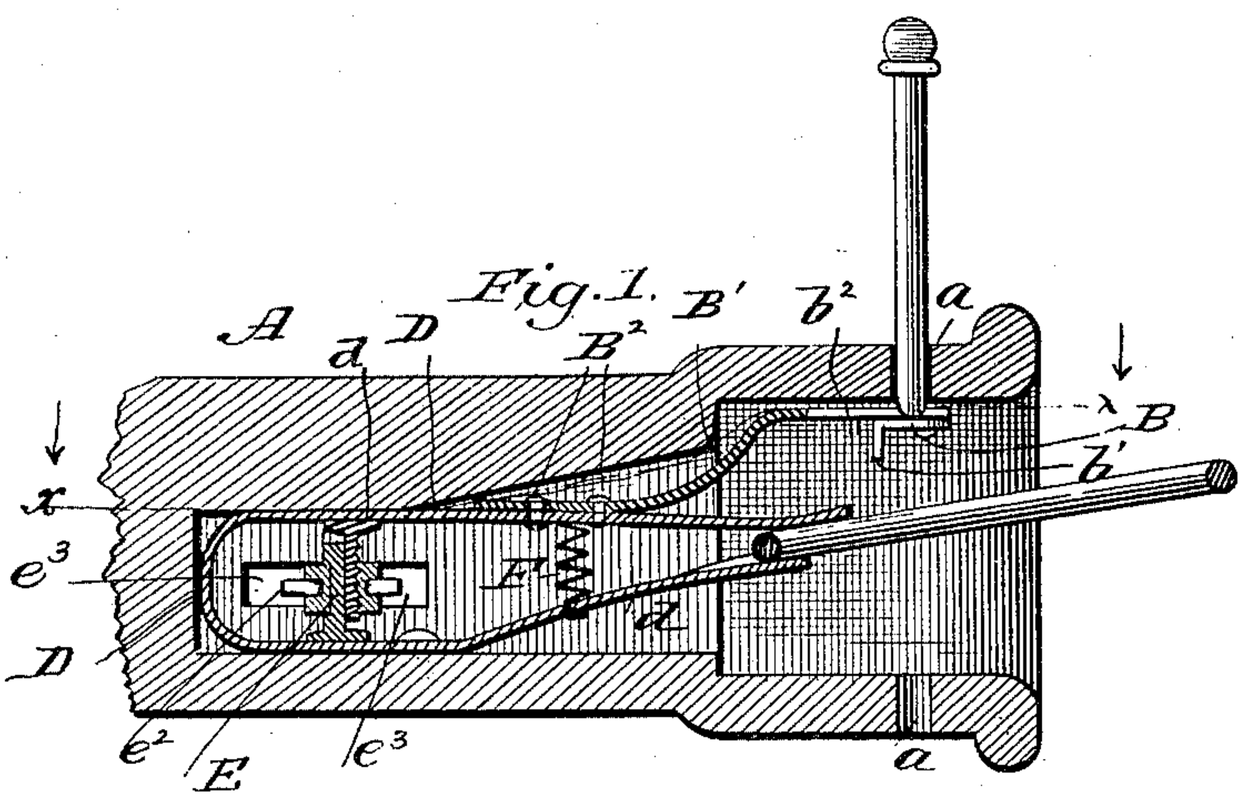


Fig. 6.

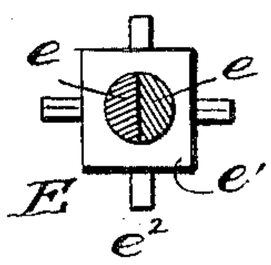


Fig. 2.

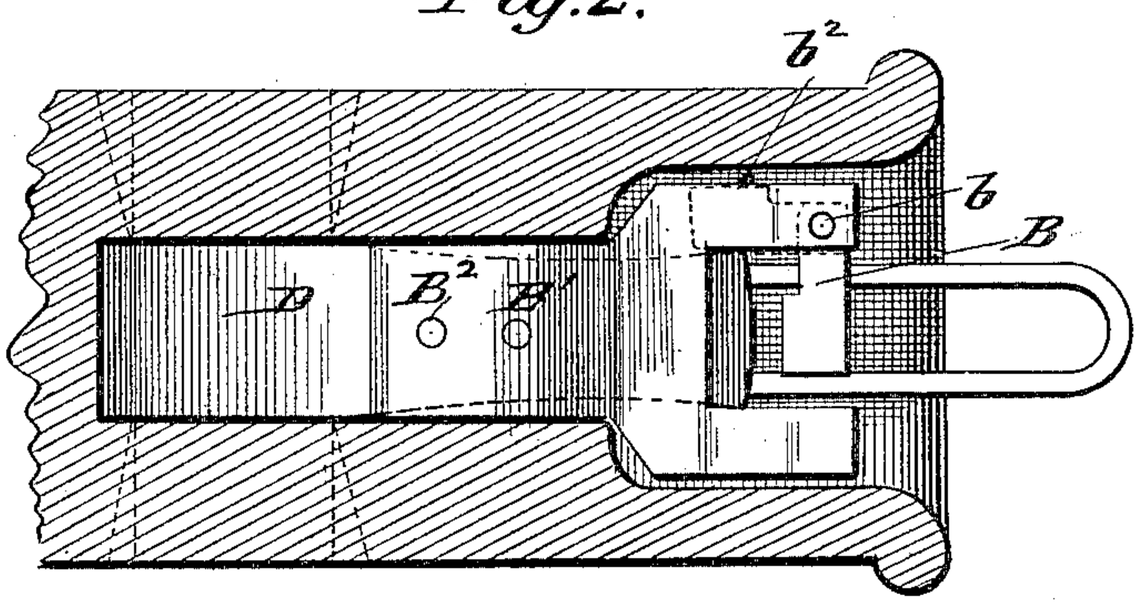


Fig. 3.

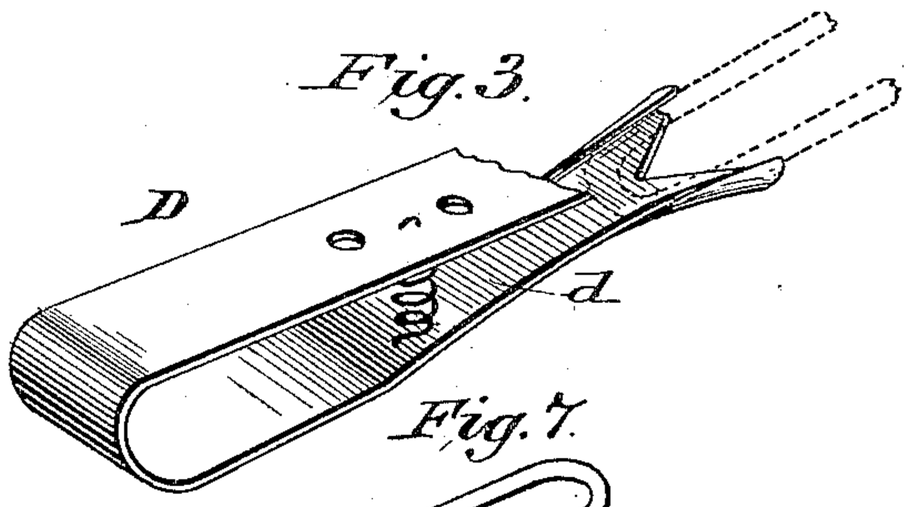


Fig. 4

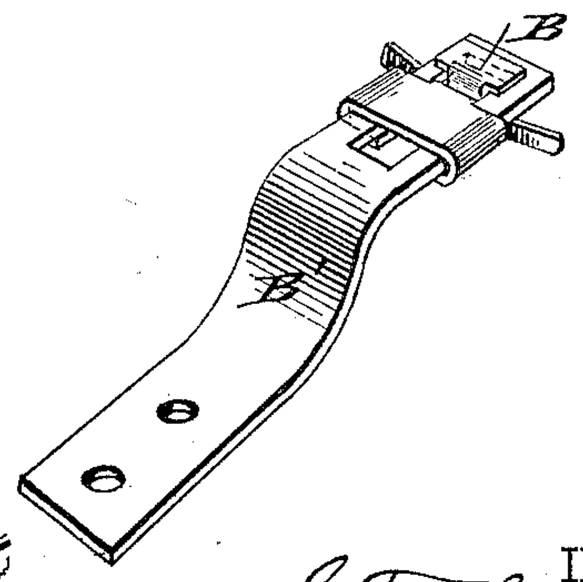
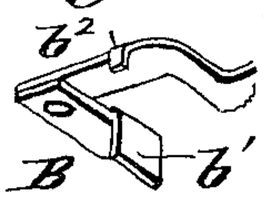


Fig. 7.

Fig. 5.



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UNITED STATES PATENT OFFICE.

SAMUEL T. GRIMMETT, OF WEST PLAINS, MISSOURI.

CAR-COUPLING.

SPECIFICATION forming part of Letters Patent No. 395,437, dated January 1, 1889.

Application filed February 13, 1888. Serial No. 263,898. (No model.)

To all whom it may concern:

Be it known that I, SAMUEL T. GRIMMETT, residing in the vicinity of West Plains, in the county of Howell and State of Missouri, have invented a new and useful Improvement in Car-Couplings, of which the following is a specification.

My invention is an improvement in car-couplings employing a link and pin and seeks to provide convenient means whereby the coupling may be effected without necessitating the operator's going between the cars, and in which the links, when the cars are coupled, will play freely on the pins and the bottom of the draw-head.

The invention consists in certain features of construction and novel combinations of parts, as will be described and claimed.

In the drawings, Figure 1 is a vertical, and Fig. 2 a longitudinal, section of a draw-head provided with my improvements. Fig. 3 is a detail view of a part of one of the springs. Fig. 4 shows a somewhat different construction of sliding-pin support. Fig. 5 is a detail view of the pin-support. Fig. 6 is a detail view of the sectional spring-retaining device, and Fig. 7 is a detail view of the bent link.

The draw-heads A have suitable pin-holes, *a*, and are provided with sliding supports B for the pin C, which supports are pivoted at *b*, have suitable depending portions, *b'*, for engagement by the link as the latter enters the draw-head, and a stop or nib, b^2, is provided to limit the movement of slide. The slide operates close to the under side of the top wall of the draw-head and may be moved forward under the pin-opening in said top wall to secure the pin elevated until the link in an approaching draw-head shall enter the first draw-head and engage and release the slide, permitting the pin to fall through the link, completing the coupling.

The springs D are secured in the draw-head and are formed with side arms, *d*, flaring at their forward ends, whereby to grasp one end of and secure the link, whereby the opposite end of the link may be held elevated to any desired degree to properly enter an approaching draw-head.

The spring D may be secured in the draw-head by bolts or by a screw, E, operating between the arms of the said spring, as shown in Fig. 1.

The screw E may be preferred, as its use facilitates the application of the spring to a draw-head and its transfer from one draw-head to another.

The bolt or clamping device E consists of two lengths or sections, *e e*, having their inner edges lapped together and movable longitudinally and their outer edges threaded and a nut-block, *e'*, fitted over said sections, so that by turning the nut in one direction or the other the sections may be fed in or out, as desired, the nut having studs e^2 adapted to receive a wrench passed through a slot, e^3, in the side wall of the draw-head. When the link is set and held in one draw-head, it will couple by running the draw-heads together, and when the draw-heads are drawn apart the link drops down and plays loosely, just the same as the ordinary link.

In order to supplement the springs D, it is preferred to provide auxiliary spring F, connected with the arms of springs D, to supplement the tension of said arms. When the coupling is made and the link rested on the bottom wall of the draw-head, the ends of the link may pass under the ends of the springs D, so the link cannot touch either of the springs.

It will be understood that the springs D form holders for the links when the link held in one draw-head is ready to be moved into contact with another draw-head, so the link cannot touch either of the springs.

By preference the pin-supports are carried on bars B', which connect at B^2 with the upper spring-section and extend upward and forward from such connection, as shown in Fig. 1.

The construction shown in Fig. 4 may prove desirable in large draw-heads, the said construction comprising a support B sliding back and forth on the bar B' and having a projection, *b'*, for engagement by the link entering the draw-head.

Having thus described my invention, what I claim as new is—

1. In a car-coupling, the combination of the draw-head, the spring-arms secured therein and having their free ends arranged to bear

close together, and one of said arms having a socket fitted to receive the end of a link, the pin-supporting slide, and a support therefor, substantially as set forth.

2. The combination, in a car-coupling, of the spring-arms adapted at their free ends to hold the link, a bar secured at one end to and projected upwardly from one of said arms, and the pin-supporting slide mounted on said bar, substantially as set forth.

3. The combination of the draw-head, the spring-arms adapted at their free ends to secure the link, the bar mounted on one of said arms and carrying the pin-supporting slide, and the screw operating between the spring-arms, substantially as set forth.

4. In a car-coupling, the combination of the draw-head, the spring having arms and secured in said draw-head and adapted at its forward end to engage and hold the link, and the auxiliary spring connected with and supplementing said armed spring, substantially as set forth.

5. The combination of the draw-head, the spring secured therein and having arms adapted at their forward ends to engage and hold the link, and the screw operating between the arms of said spring, substantially as set forth.

6. The improved car-coupling herein described, consisting of the draw-head, the pin-supporting slide movable under the upper wall thereof, the spring having arms adapted at their forward ends to engage and hold the link, the screw operating between the arms of said spring, and the auxiliary spring, substantially as and for the purposes specified.

7. In a car-coupling, a spring, D, having arms bearing close together at their free ends, and one of the arms having its free end provided with a socket to receive the link, substantially as set forth.

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