

(No Model.)

D. BELLON.  
CAR COUPLING.

No. 390,944.

Patented Oct. 9, 1888.

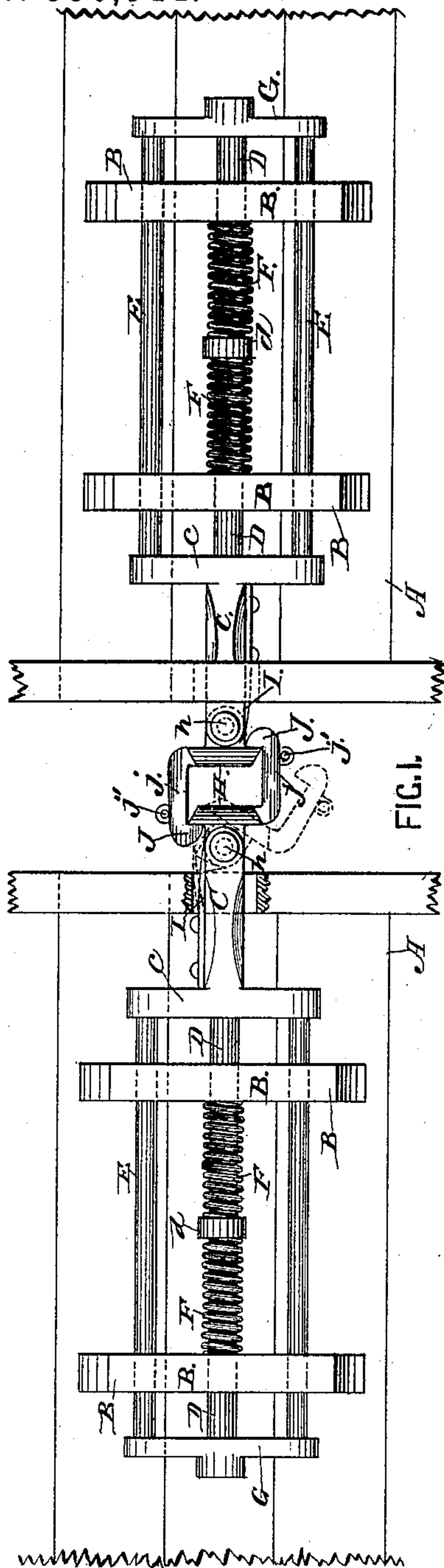


FIG. 1.

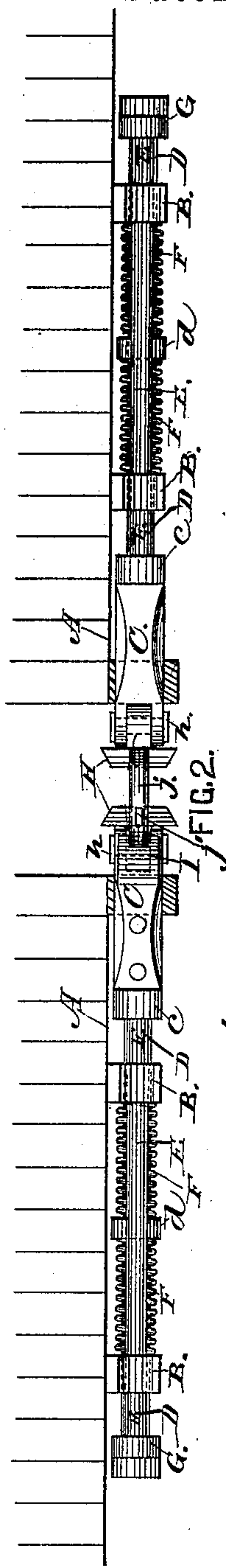


FIG. 2.

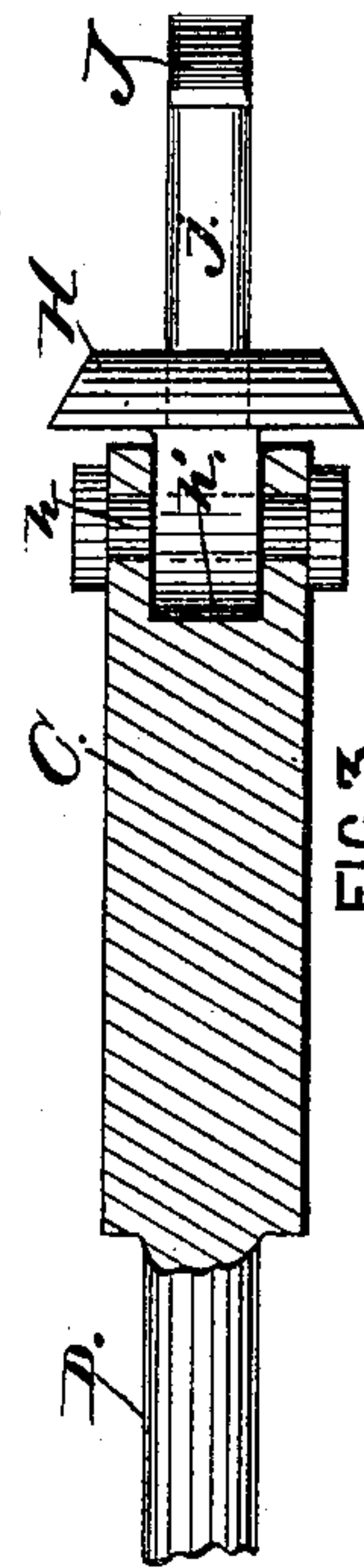


FIG. 3.

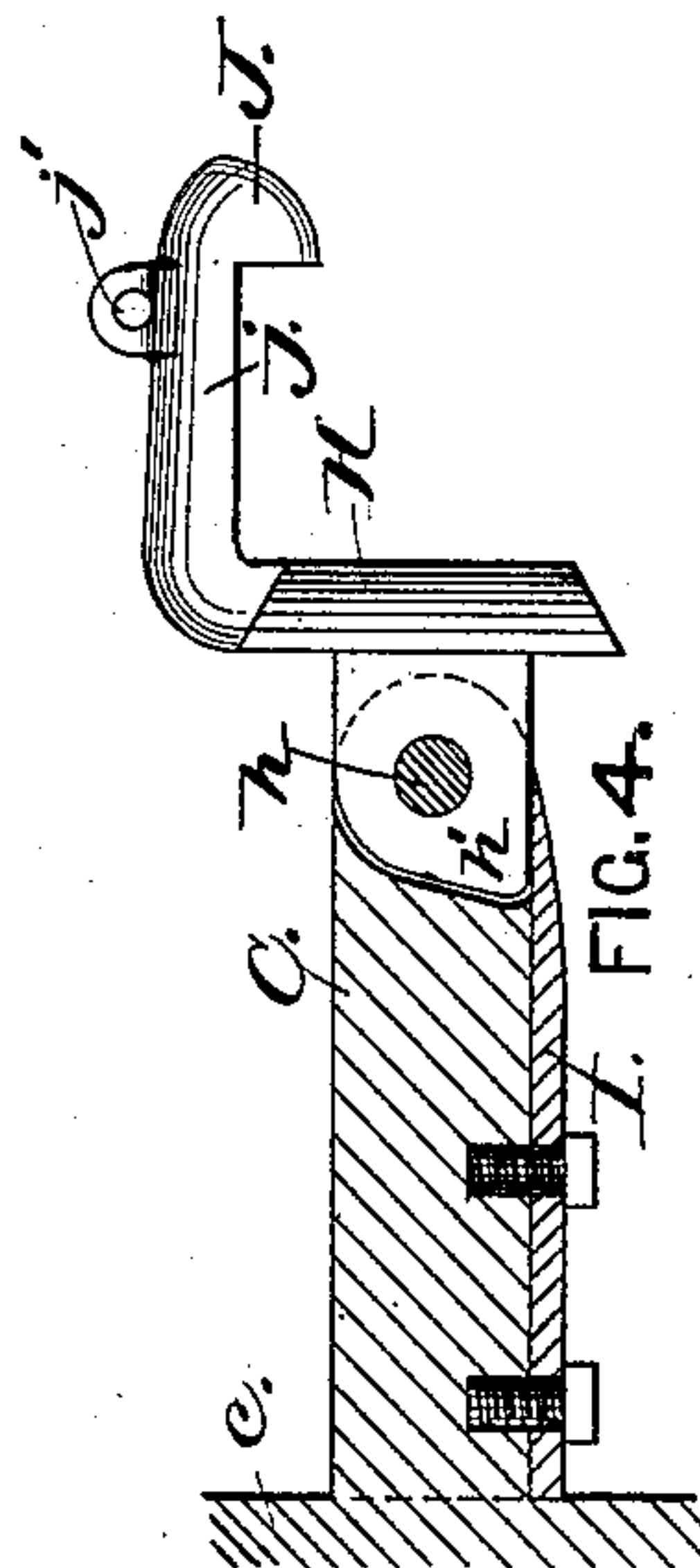


FIG. 4.

WITNESSES:

*S. B. Brewer,*  
*H. V. Scattergood.*

INVENTOR:

DAVID BELLON,

by

*William H. Low,*

ATTORNEY.



# UNITED STATES PATENT OFFICE.

DAVID BELLON, OF MCKOWNVILLE, NEW YORK.

## CAR-COUPLING.

SPECIFICATION forming part of Letters Patent No. 390,944, dated October 9, 1888.

Application filed April 19, 1887. Serial No. 235,333. (No model.)

*To all whom it may concern:*

Be it known that I, DAVID BELLON, of McKownville, in the county of Albany and State of New York, have invented new and useful Improvements in Car-Couplers, of which the following is a specification.

My invention relates to improvements to the class of car-couplers that have coupling-hooks pivoted to the draw-bar; and the object of my invention is to provide a simple and effective coupling device of the character above referred to. This object I attain by the mechanism illustrated in the accompanying drawings, which is herein referred to and forms part of this specification, and in which—

Figure 1 is an inverted plan view of part of the adjoining ends of two cars provided with my couplers; Fig. 2, a side elevation of the same; Fig. 3, an enlarged longitudinal section of the draw-bar, with the bumper-head and coupling-hook shown in elevation; and Fig. 4, a horizontal section of Fig. 3.

In the drawings, A is the under side of the end of a car, and B the transverse abutment-blocks secured thereto.

C is the draw-bar, having at its inner end a cross-bar, *c*, from which is extended rearwardly a central bar, D, having a collar, *d*, at or near its middle, and parallel with said central bar two side bars, E. The bars D and E are fitted to slide freely through openings in the abutment-blocks B, and the side bars, E, prevent the draw-bar C from being turned out of its required position. Springs F are interposed between the collar *d* and both abutment-blocks B. The foremost spring forms an elastic cushion when the draw-bar is subjected to a pulling strain, and the rearmost spring performs a like office when the draw-bar receives a percussive shock. The rearmost ends of the bars D and E are connected together by a cross-bar, G.

H is the bumper-head, which is pivoted to the outer end of the draw-bar by a pivot-pin, *h*, and has a rearward elongation, *h'*, against which a spring, I, secured directly upon the side of and moving with said draw-bar, bears to keep the bumper-head normally in a central position, said elongation engaging with the closed side of the mortise in which it is placed to prevent the bumper-head from being moved in a direction that will carry the elongation

away from its contact with the spring I. A hook, J, is formed on an arm, *j*, which projects forward from one edge of the bumper-head H, and the opposite edge of the latter is beveled to form an incline to push the hook of a connecting-coupler outwardly until the shoulder of the hook can pass behind the rear side of the bumper-head and engage therewith. The arm *j* has on its outer edge an eye, *j'*, for receiving a rope or other attachment, by which the hook J can be drawn back, as indicated by dotted lines in Fig. 1, for the purpose of disengaging the couplers from each other, and to effect the latter it is only necessary to draw back one of the hooks J until the bumper-head with which it is integral will clear the hook of the coupler with which said hook is engaged. As soon as the couplers are separated, a releasement of the strain on the hook will permit the spring I to force the bumper-head H back to its normal position.

It will be seen that in making a connection with my couplers the faces of the bumper-heads of two conjoining couplers will be brought into forcible contact, thereby compressing their rearmost springs F and assisting the spring I to bring the bumper-heads back to their normal position, and then, when the pulling strain is applied, the hooks J and bumper-heads H of both couplers will be mutually engaged at one time, and thereby a direct strain is thrown on the parts of both that will overcome any tendency to produce an accidental disengagement of the couplers. By reason of the pivotal connections of the bumper-head with the draw-bars ample provision is made in my coupler to permit the cars coupled thereby to pass freely over the curves in a railway-track with safety.

I claim as my invention—

The combination, with a draw-bar provided with a rearwardly-extending central bar having a collar and carrying two springs which are interposed between said collar and two abutment-blocks, said draw-bar being provided with side bars which are parallel with said central bar and are fitted to slide in said abutment-blocks, of a bumper-head pivoted to said draw-bar and provided with a rearward elongation which receives the pressure of a spring that is secured directly to the side of

the draw-bar to normally retain said bumper-head in a central position, said bumper-head being provided with a hook that projects forward from one edge thereof and that is adapted  
5 to engage with the rearmost face of a bumper-head of a like coupler, the engagement being made in such manner that the hooks of the two couplers will mutually engage with the bumper-heads of the conjoining-couplers and will lie at opposite sides of a center line drawn 10 through the draw-bars, as herein shown and described, and for the purpose specified.

DAVID BELLON.

Witnesses:

CH. HEIN,

WM. H. LOW.