(No Model.)

W. J. BROWN.

CAR COUPLING.

No. 325,155. Patented Aug. 25, 1885.

Fig. 1.

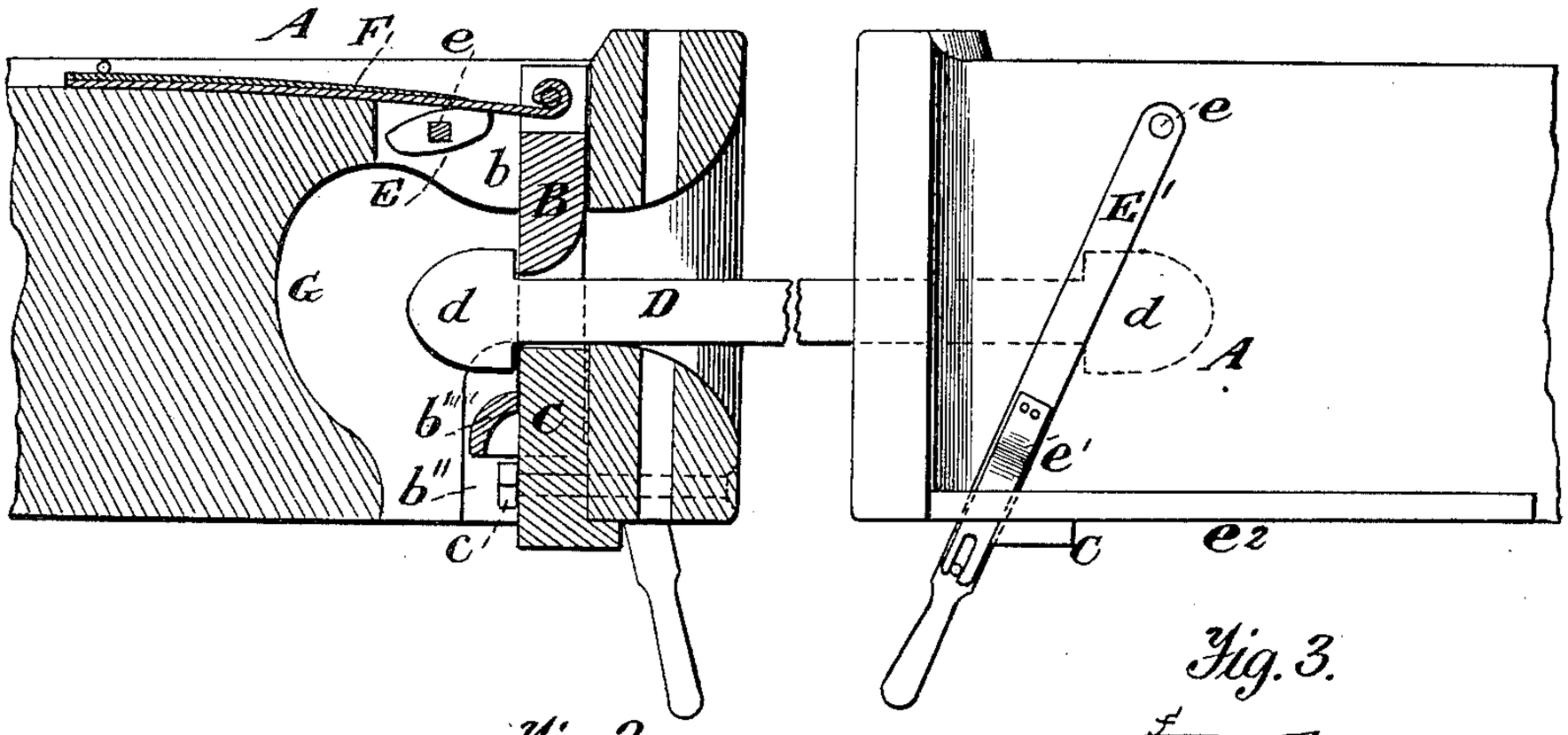
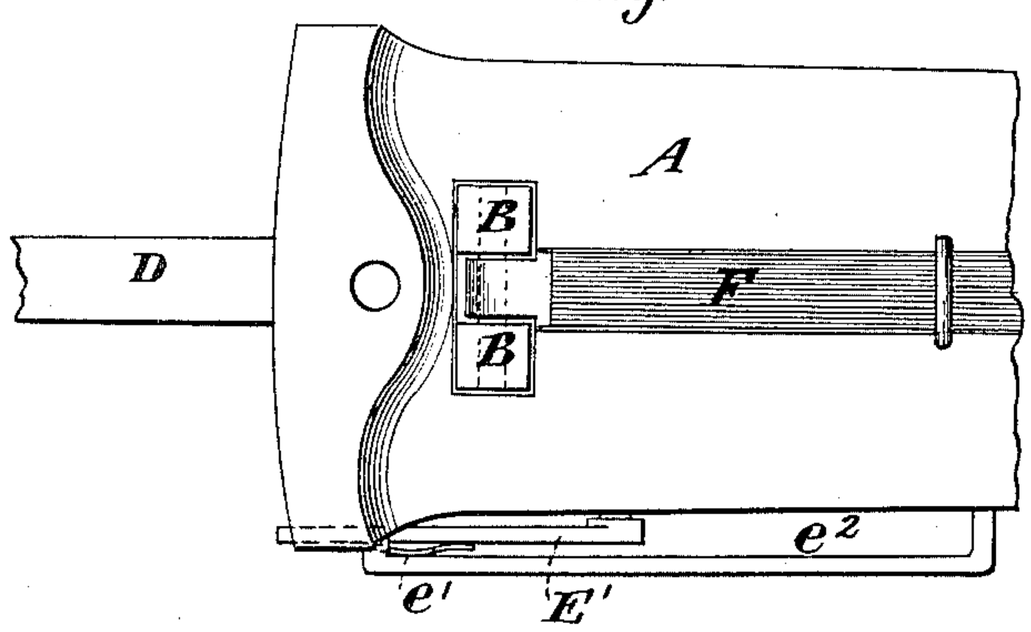


Fig. 2.

Fig. 3.



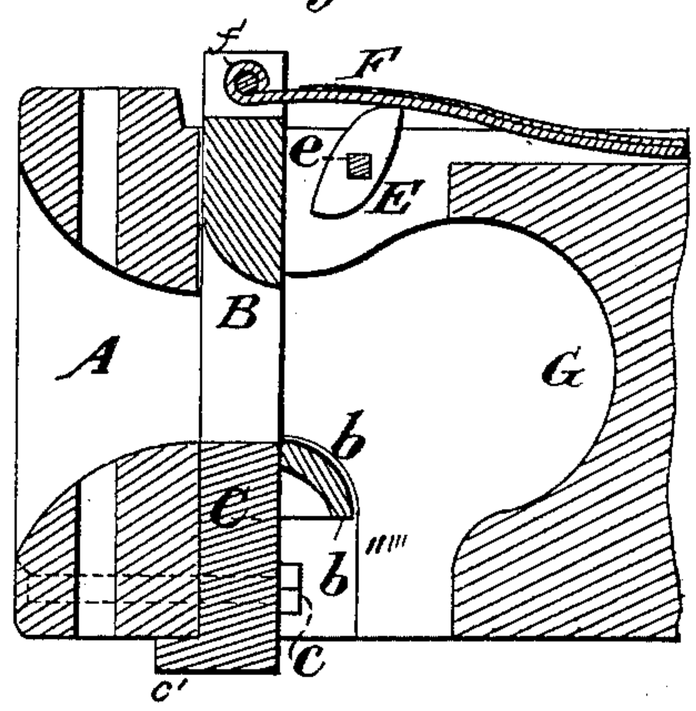


Fig. 4.

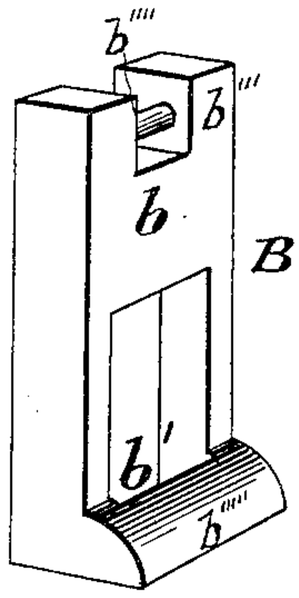
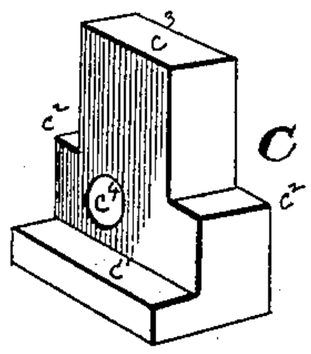


Fig. 5.



Witnesses.
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UNITED STATES PATENT OFFICE.

WILLIAM JOHN BROWN, OF WEBSTER CITY, IOWA.

CAR-COUPLING.

SPECIFICATION forming part of Letters Patent No. 325,155, dated August 25, 1885.

Application filed March 21, 1885. (No model.)

To all whom it may concern:

Be it known that I, W. J. BROWN, of Webster City, county of Hamilton, State of Iowa, have invented a new and Improved Self-Acting Car-Coupler for Railroad-Cars, of which the following is a specification.

The invention relates to that class of car-couplings in which an arrow-head link is used to press open one or two spring-jaws which then fall in behind the head.

Figure 1 of the drawings is a longitudinal vertical section showing the link held; Fig. 2, a plan view; Fig. 3, a longitudinal section showing the movable jaw held up; and Figs. 4 and 5 are perspective views of the jaws removed from the draw-head.

In the drawings, A represents the draw-head, B the movable jaw, and C the fixed jaw. D is the link, having heads *d d* at the ends. E is a cam on a shaft, *e*, which is turned by a hand-lever, E′, to lift the spring F, which carries the movable jaw B. The lever E′ has a spring, *e′*, fastened thereto and end slotted at the free end, so as to press against the keeper or guide e^2, and thus hold the jaw B up or down.

The jaws B C are peculiarly constructed, so as to enable them to perform their functions to the best advantage, and not to be liable to get out of order.

The jaw B has a solid part, *b*, an opening, *b′*, through which the link-head passes, an open top slot, *b‴*, across which is arranged the pivot for spring F, and a rear projection, b'''', by which the link-head is raised in uncoupling.

The jaw C has an upper tenon, c^3, on which the jaw B slides, and which works in the aperture *b′*. c^2 c^2 are shoulders or stops for the sliding jaw B to rest upon when pressed down by spring F. *c′* is a front flange at the bottom to fit under the part *a* of the draw-head, and c^4 is a hole through which passes a screw-bolt fastening, *c*. The draw-head is suitably grooved to receive these jaws and has a cavity, G, behind them for the link-heads.

The jaw B in its upward movement is liable to cramp and jam in the grooves of draw-head when lifted by an arm which necessarily moves in the arc of a circle. In order to overcome this tendency, I use a spring-arm of flat elastic metal and having an eye, *f*, at the front end, so that the eccentricity of the motion of jaw B and arm F will be taken up mainly by the yield of the spring. The spring-arm thus performs two functions in uncoupling—namely, to raise the jaw and to neutralize the eccentricity of its own motion.

Having thus described all that is necessary to a full understanding of my invention, what I claim as new, and desire to protect by Letters Patent, is—

1. The sliding jaw B, provided with opening *b′* and rear projection, b'''', in combination with a fixed jaw, C, having tenon c^3 and shoulders c^2 c^2, whereby said jaw in rising not only unlocks itself from the link but also the fixed jaw by carrying the link-head up above said fixed jaw.

2. The combination of a draw-head having keeper e^2, the lever E′, carrying spring *e′* near its handle end, and the shaft *e*, carrying cam E, with the sliding jaw B, as and for the purpose specified.

WILLIAM JOHN BROWN.

Witnesses:
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