H. H. FLEMING.

CAR COUPLING.

No. 50,811. Patented Nov. 7, 1865.

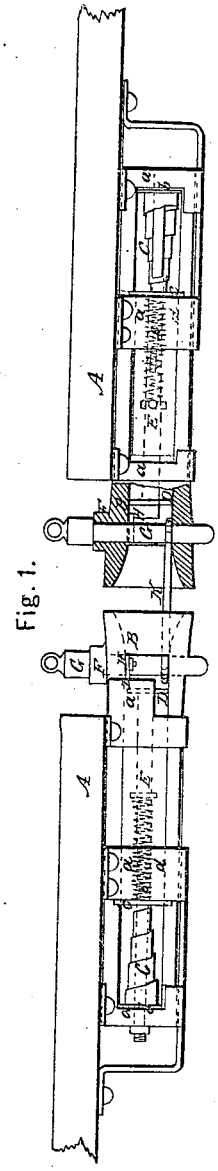

Fig. 1.

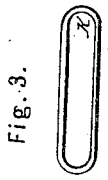

Fig. 3.

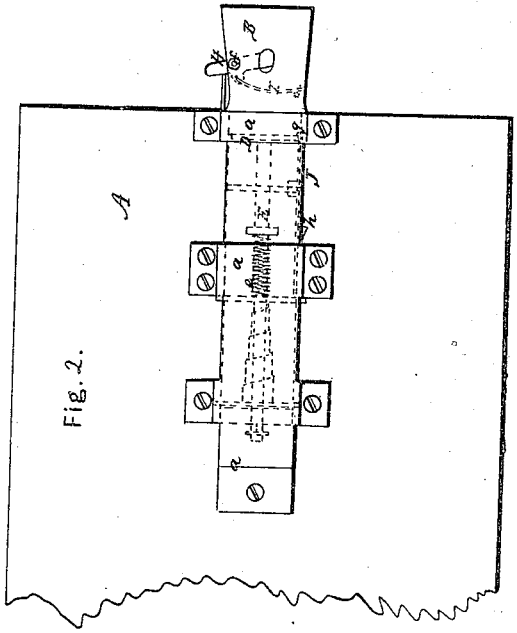

Fig. 2.

Witnesses

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H. H. FLEMING, OF KOKOMO, INDIANA

IMPROVED CAR-COUPLING.

Specification forming part of Letters Patent No. 50,811, dated November 7, 1865.

To all whom it may concern:

Be it known that I, H. H. FLEMING, of Kokomo, in the county of Howard and State of Indiana, have invented a new and Improved Car-Coupling; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable those skilled in the art to make and use the same, reference being had to the accompanying drawings, forming part of this specification, in which—

Figure 1 is a side view of my invention, partly in section; Fig. 2, an inverted-plan view of the same; Fig. 3, a detached view of a link pertaining to the same.

Similar letters of reference indicate corresponding parts.

This invention relates to a new and improved car-coupling of that class which are termed "self-acting," or "self-coupling;" and it consists in a novel arrangement of the draw-bar and the manner of supporting and letting fall the coupling-pin, and the retaining of the link or shackle in proper position, whereby the coupling is made to act in the most efficient and perfect manner, and without the liability of getting out of repair.

A A represent the platforms at the ends of two adjoining cars, and B B are the draw-heads, which are fitted in sockets or guides *a* secured to the under sides of the platforms, each draw-head having a spring, C, fitted within it at its rear end. These springs C may be of coil or spiral form, their rear ends bearing against a pendent plate, *b*, in the rear guides *a*, and their front ends against plates *c* in the draw-heads. These springs C have a tendency to keep the draw-heads forced outward to their fullest extent, or as far as it is designed for them to project out beyond the platforms.

Within each draw-head there is placed a plate, D. These plates are attached to rods E E, which are allowed to slide freely in a cross-piece, *d*, in the draw-heads, said rods having spiral springs *e* upon them, which have a tendency to keep the plates D pressed or forced forward in the draw-heads to the extent of their movement, as will be fully understood by referring to the dotted lines in Figs. 1, 2, and 3.

On the upper part of each draw-head, near their front ends, there are collars F, through which the coupling-pins G pass. These collars serve as guides or supports for said pins, to retain them in a vertical position, and when not in use, or when they do not pass through the link or shackle, they are held up by a bar, H. These bars H pass through openings in the sides of the draw-heads, and they work on pivots *f*, and have springs I acting against them, said springs having a tendency to keep the inner parts of the bars underneath the openings in the draw-heads, through which the coupling-pins pass, thereby supporting or holding up said pins.

In one side of each draw-head B there is fitted a flat spring, J, having a lip, *g*, at its outer end, to serve as a catch and hold the plate D back when forced inward by the link or shackle, and at the outer side of each of these plates there is attached a beveled projection, *h*, (shown in Fig. 2,) said projections being near the central guide *a*.

The link or shackle K shown in Figs. 1 and 3 may be of the usual form or shape.

The operation is as follows: When it is designed that the adjoining cars shall couple or be connected together, the pin G of the draw-head not having the link or shackle in it is raised so that it will be supported by the bar H, and as the cars approach the ends of the two draw-heads will come in contact and be slightly pressed back, the springs C yielding or giving, and the outer end of the bar H will come in contact with the front edge of the outermost guide *a*, and be moved or actuated sufficiently to let the coupling-pin G down through the link or shackle, and as the draw-head is forced back the beveled projection *h* will come in contact with the edge of the central guide *a* and the rear part of the spring J will be forced or pressed inward, so that the lip *g* will be free from the end of plate D and the latter liberated, so that the spring *e* will force it out against the end of the link or shackle, shoving the latter outward. These plates D serve to keep the link in proper position, preventing undue rattling and jars or concussions on the coupling-pins.

I would remark that the coupling-pins G are of oval form in their horizontal section, so as to have greater strength than cylindrical ones of the same weight, the pull on the pin being in the direction of its greatest thickness.

Having thus described my invention, I claim as new and desire to secure by Letters Patent—

1. The yielding draw-heads B B, in connection with the pin-sustaining bars H, arranged substantially as shown, so that when the draw-heads are pressed inward or forced back in consequence of coming in contact with each other the bars H will be actuated and the pin let down through the link or shackle.

2. In connection with the yielding draw-heads and pin-sustaining bars, the yielding plates D, arranged to operate in connection with the spring-catch, links, and draw-heads, substantially as and for the purpose set forth.

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Witnesses:

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