H. BLACKMORE.

Car-Coupling.

No. 164,419. Patented June 15, 1875.

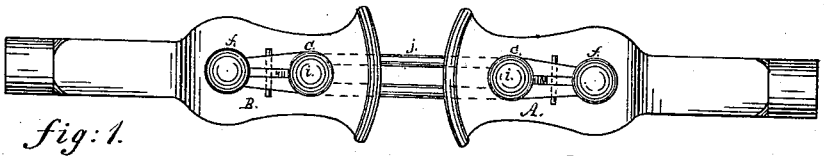

fig: 1.

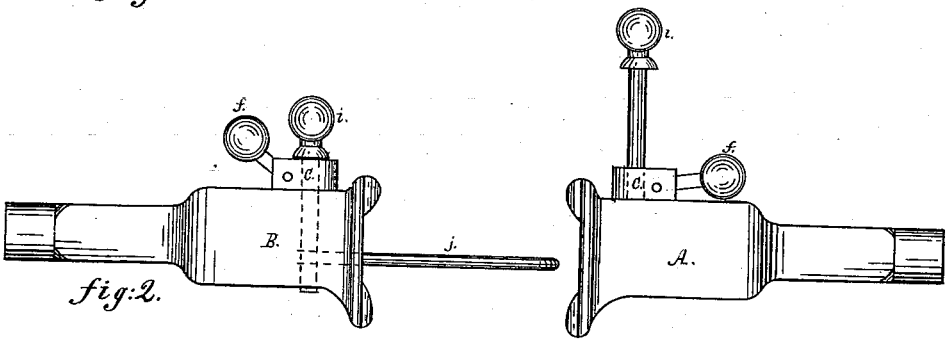

fig: 2.

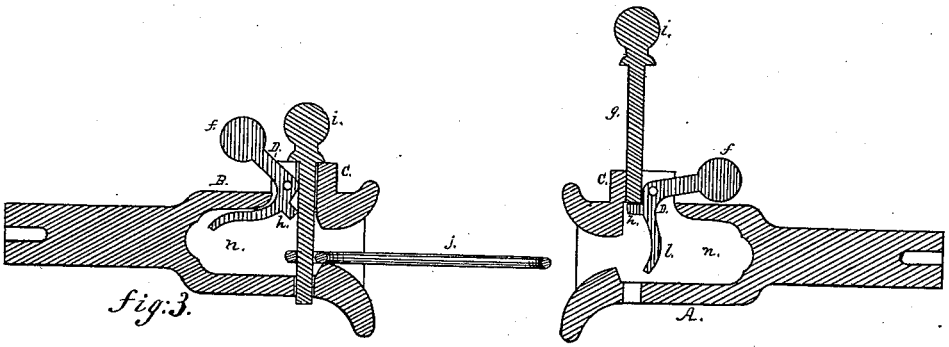

fig: 3.

fig: 4.

Witnesses.
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HENRY BLACKMORE, OF PITTSBURG, PENNSYLVANIA.

IMPROVEMENT IN CAR-COUPLINGS.

Specification forming part of Letters Patent No. **164,419**, dated June 15, 1875; application filed March 25, 1875.

To all whom it may concern:

Be it known that I, HENRY BLACKMORE, of Pittsburg, in the county of Allegheny and State of Pennsylvania, have invented a new and useful Improvement in Car-Coupling; and I do hereby declare that the following is a full and exact description thereof, reference being had to the accompanying drawings, and to the letters of reference marked thereon.

My invention relates to an improvement in car-coupling, and is an improvement upon the car-coupling for which Letters Patent were granted me March 22, 1864, numbered 42,041.

The nature of my present improvement consists in providing the buffers with pin-holders, used in connection with the ordinary coupling-pin, and weighted triggers for holding them in an elevated position, and in connection therewith a coupling-link having an opening in one end of it, the diameter of which is a little more than the diameter of the coupling-pin, so that when the link is placed in one of the buffer-heads, with a coupling-pin passing through said opening in the link, it will be held in the proper position for entering the buffer to which it is to be coupled, and for displacing the weighted trigger for the purpose of allowing the elevated coupling-pin to drop through the larger opening of the coupling-pin, and thereby automatically couple the cars.

To enable others skilled in the art to make and use my invention, I will proceed to describe its construction and operation.

In the accompanying drawings, which form part of my specification, Figure 1 is a top view of my improved buffers coupled together. Fig. 2 is a side elevation of the same. Fig. 3 is a vertical and longitudinal section of two buffer-heads, representing the position of the several parts prior to being coupled together. Fig. 4 represents a top view or plan of the coupling-pin.

A and B represent the buffers, each of which is provided with a pin-holder, C, in which is pivoted at *e* a weighted trigger, D, the weight *f* of which should be about equal to the weight of the coupling-pin *g*, so that when the point of the pin is resting upon the projection *h* of the weighted trigger D it will be held in an elevated position in the pin-holder C, as represented in Fig. 3. The coupling-pin *g* is of ordinary construction, having a head, *i*, with suitable shoulders to prevent it from dropping through the openings in the buffers. The coupling-link *j* is of ordinary construction, excepting the small opening *k*, made in one end of it, the diameter of which opening should correspond to the diameter of the coupling-pin *g*. The buffers hereinbefore described are attached to and arranged with relation to the end of the cars in the ordinary manner.

As the construction of my improved coupling for cars will be readily understood from the foregoing description and by reference to the accompanying drawings, I will therefore proceed to describe its operation, which is as follows:

The coupling-link *j* is placed in the buffer-head A, with the coupling-pin *g* passing through the opening *k* of the link *j*. In the buffer B the pin *g* is placed in the pin-holder C, with the point of the pin resting on the projection *h* of the trigger D, as represented in Fig. 3. The several parts of the buffers being thus arranged for coupling together, the buffer A approaching the buffer B, the link *j* will enter the flaring-mouthed opening of the buffer B, and the end of the link, striking against the pendant *l* of the weighted trigger D, will throw it back into the cavity *m*, forcing from under the point of the pin *g* the projection *h*, and thereby allow the pin to pass down through the opening of the link, thereby automatically coupling the cars together, whereby the necessity of the operator placing himself between the cars for the purpose of coupling them is avoided, and the danger attendant upon the ordinary manner of coupling is obviated.

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

The combination of buffer A, provided with pin-holder C, with pivoted trigger D, having weight *f*, projection *h*, and pendant *l*, with the link *j* and pin *g*, all substantially as and for the purpose set forth.

H. BLACKMORE.

Witnesses:
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