

E. BOLMAN & G. S. W. CLARKE.
Improvement in Car-Couplings.

No. 114,755.

Patented May 16, 1871.

FIG. I.

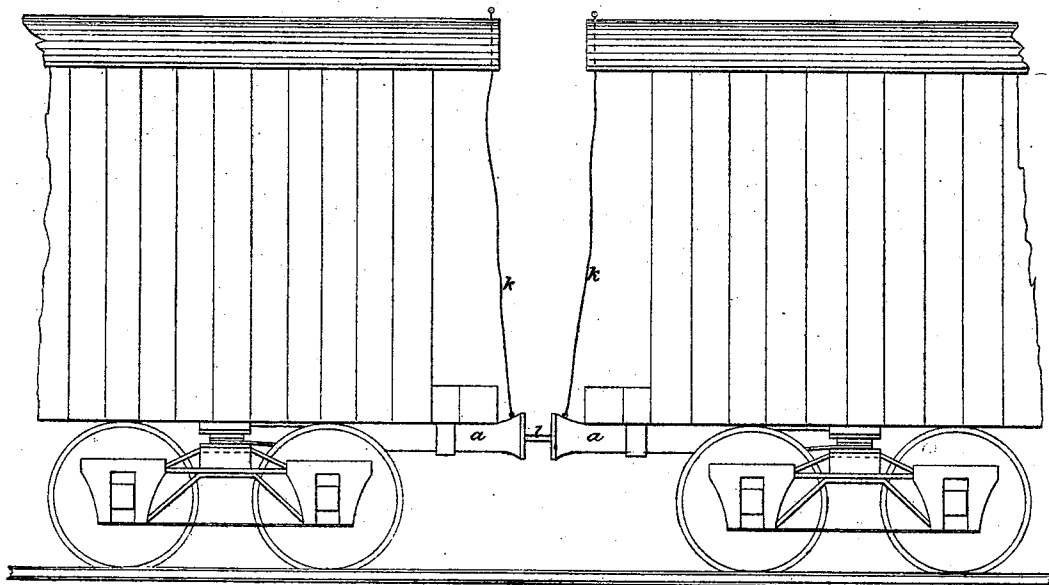


FIG. II.

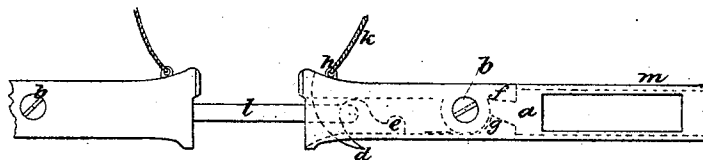


FIG. III.

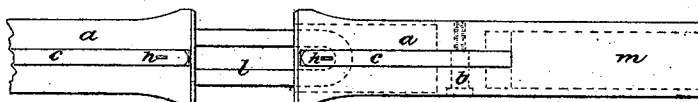
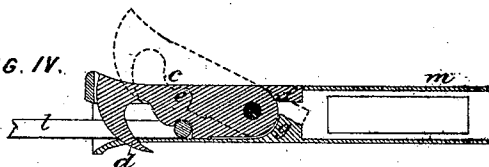


FIG. IV.



Witnesses

Charles Egge

Charles L. R. Simpson

Inventors

Edward Bolman
George Simpson Watson Clarke

United States Patent Office.

EDWARD BOLMAN AND GEORGE SIMPSON WATSON CLARKE, OF HALIFAX,
NOVA SCOTIA.

Letters Patent No. 114,755, dated May 16, 1871.

IMPROVEMENT IN CAR-COUPPLINGS.

The Schedule referred to in these Letters Patent and making part of the same.

To all whom it may concern:

Be it known that we, EDWARD BOLMAN, book-keeper, and GEORGE SIMPSON WATSON CLARKE, book-keeper, both of the city of Halifax, in the county of Halifax, in the Province of Nova Scotia, have invented new and useful "Improvements on Couplings for Railway Cars;" and we do hereby declare that the following is a full, clear, and exact description of the construction and operation of the same, reference being had to the annexed drawing, where—

Figure I represents a side elevation of cars and couplings.

Figure II represents a side elevation of couplings.

Figure III represents a plan of couplings.

Figure IV represents sectional elevation of couplings.

This invention relates to improvements on car-couplings to render them self-acting in an inexpensive and substantial form, capable of withstanding wear and tear equal to the ordinary couplings in use, and obviating the danger to persons employed in the operation.

In the drawing hereunto annexed similar letters of reference indicate like parts.

Letter *a* is the body, of the ordinary form, but with sides forming a rectangular tube, as shown in the drawing.

Through the sides of this a pin, *b*, passes, attaching a pawl, *c*, of the form shown in the drawing, provided with a hook, *d*, at its end and a recess, *e*, as delineated.

The inner extremity of the pawl is provided with the projection *f*, and the tube at this point has a projection, *g*, preventing the pawl being raised more than the required amount.

The pawl is situated in a slot in the upper side of the body *a*, centrally and longitudinally with it.

h is an eye on the top of *c* for attaching a line or cord, *k*, to for lifting the hook *d*.

l is the link, of ordinary and suitable size and form.

The inner extremity *m* of the body is terminated in any of the known or required forms for attaching to the car in any suitable manner.

The action of the couplers is as follows; referring to Figs. I, II, and III. The position of the parts when the cars are coupled and being hauled is so clearly shown therein as to require no further explanation than to say that the line or cord *k* may be led to the top of the car, or to any other more suitable point, by pulleys or otherwise, as required.

When cars are to be coupled together both the pawls will be in the position of the pawl shown in section in Fig. IV, the end of the link being placed in the recess *e* in one prior to the car being backed down to connect; by this arrangement the link is held in a horizontal position by the weight of the pawl. When the end of the link in this position comes against the hook in the other coupling its curved inclined outer surface causes it to rise and engage with the link. When it is desired to uncouple the cars by the line *k* the hook *d* is raised to the position shown in dotted lines in the figure.

Having now described the construction and operation of our invention, to which we have given the name of "the BOLMAN and CLARKE car-couplings,"

What we claim as our invention, and wish secured by Letters Patent, is as follows:

The body *a*, having the pawl *c*, provided with the recess *e* for holding the link *l* in a horizontal position, as described, and for the purpose set forth

EDWARD BOLMAN.

GEORGE SIMPSON WATSON CLARKE.

Witnesses:

CHARLES LEGGE,

CHARLES G. C. SIMPSON.