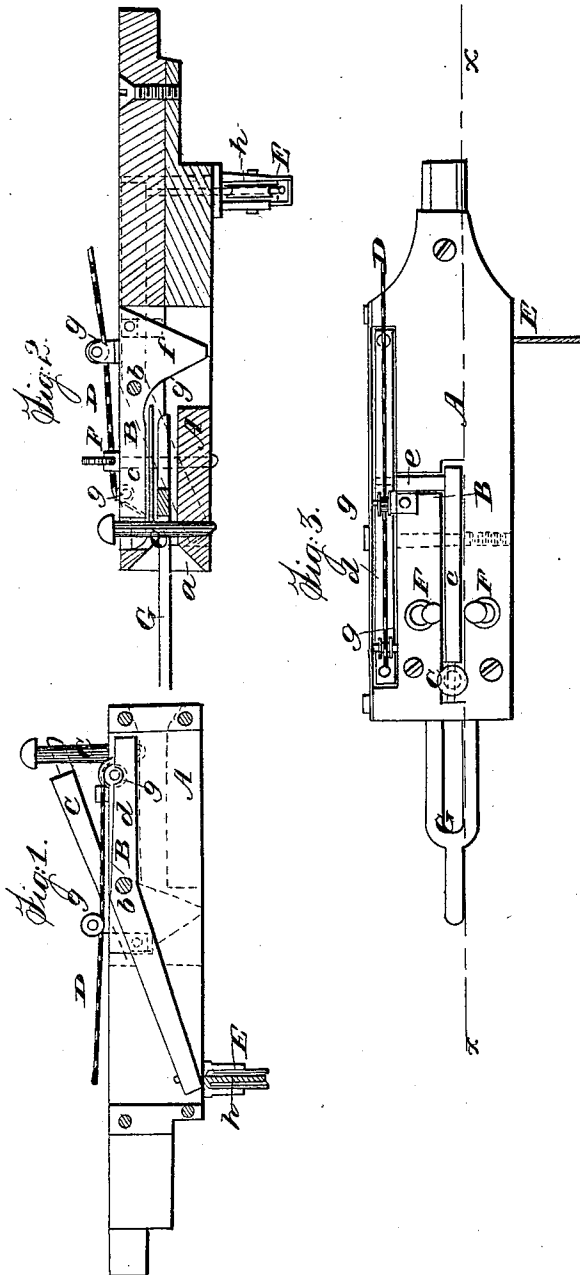


J. H. QUACKENBUSH.

Car Coupling.

No. 20,817.

Patented July 6, 1858.



UNITED STATES PATENT OFFICE.

J. H. QUACKENBUSH, OF OWASSO, MICHIGAN.

RAILROAD-CAR COUPLING.

Specification of Letters Patent No. 20,817, dated July 6, 1858.

To all whom it may concern:

Be it known that I, J. H. QUACKENBUSH, of Owasso, in the county of Shiawassee and State of Michigan, have invented a new and Improved Car-Coupling; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the annexed drawings, making a part of this specification, in which—

Figure 1, is a side view of my improvement the plate nearest the eye being removed. Fig. 2, is a vertical longitudinal section of ditto, taken in the line *x, x*, Fig. 3. Fig. 3, is a plan or top view of ditto.

Similar letters of reference indicate corresponding parts in the several figures.

This invention consists in having the pin or bolt, which secures the link in the head, attached to or connected with a lever constructed and arranged in a peculiar way so that the pin may be raised and the link released from within the car to which the coupling is directly attached and the pin also raised and the link released in case said car or its adjoining one is thrown from or runs off the track.

To enable those skilled in the art to fully understand and construct my invention I will proceed to describe it.

A, represents a quadrilateral metal head or socket which is attached, one to each end of a car in the usual way to receive the links which connect the cars together. The head or socket has its outer end beveled so as to form a proper mouth *a*, to receive the end of the link, see Fig. 2. In the head A, a lever B, is secured by a fulcrum pin *b*. This lever is of peculiar construction it being formed of two parallel bars *c, d*, connected by a cross bar *e*, see Fig. 3. The outer end of the bar *c*, is provided with a tenon or spur which passes through a pin or bolt C, said pin or bolt passing vertically through the head near its outer end. To the under side of the bar *c*, at its inner end a taper pendent *f*, is attached, as shown clearly in Fig. 2, said pendent being within and at the back end of the recess *g'*, which receives the link, see Fig. 2. To the front end of the bar *d*, of lever B, a chain D is attached. This chain passes over and under pulleys *g, g*, on the head A, and into the car to which the head is attached. To the back

end of bar *d*, a chain E, is attached. This chain E, passes down through the back end of the head A, over or around proper pulleys *h*, and is attached to the exterior of the adjoining car. The cars are all provided at each end with the same device above described and the chain E, of each lever B, is attached to an adjoining car.

F, F, are bolts which pass vertically through the head A, that is when it is not designed that the links shall be coupled.

G, is the link of usual construction. When the pin C, is raised as shown in Fig. 1, and the end of link G, comes in contact with the pendent projection *f*, the pin C, will be forced down through the link and if the link be fitted in the head of one car it will couple itself in the head of an adjoining car as the two come together. If however the bolts F, be fitted in the head A, the link G, will be prevented from throwing down the pin C, and no connection will be formed. If necessity requires the pin or bolt C, may be elevated from within the car by pulling the chain D, either directly or through the intervention of a lever, and in case a car is thrown off from the track it will detach itself from the adjoining cars in consequence of the chains E, of the adjoining cars being attached to it.

I am aware that various forms of self-couplings have been devised and I do not claim separately any of the parts irrespective of their construction, arrangement, and relative position as described whereby the device is not only rendered self-coupling but is also rendered susceptible of being detached from within the cars and the cars also if thrown from the track made to disconnect themselves.

I claim therefore as new and desire to secure by Letters Patent.

The lever B, formed of two bars *c, d*, fitted in the head or socket A, provided with a pendent *f*, connected with the pin or bolt C, and having the chains D, E, attached to it, the whole being combined and arranged as and for the purpose set forth.

J. H. QUACKENBUSH.

Witnesses:

JAY L. QUACKENBUSH,
J. F. MILLER.