(No Model.)

T. L. McKEEN.

CAR COUPLING.

No. 301,737. Patented July 8, 1884.

Fig. 1.

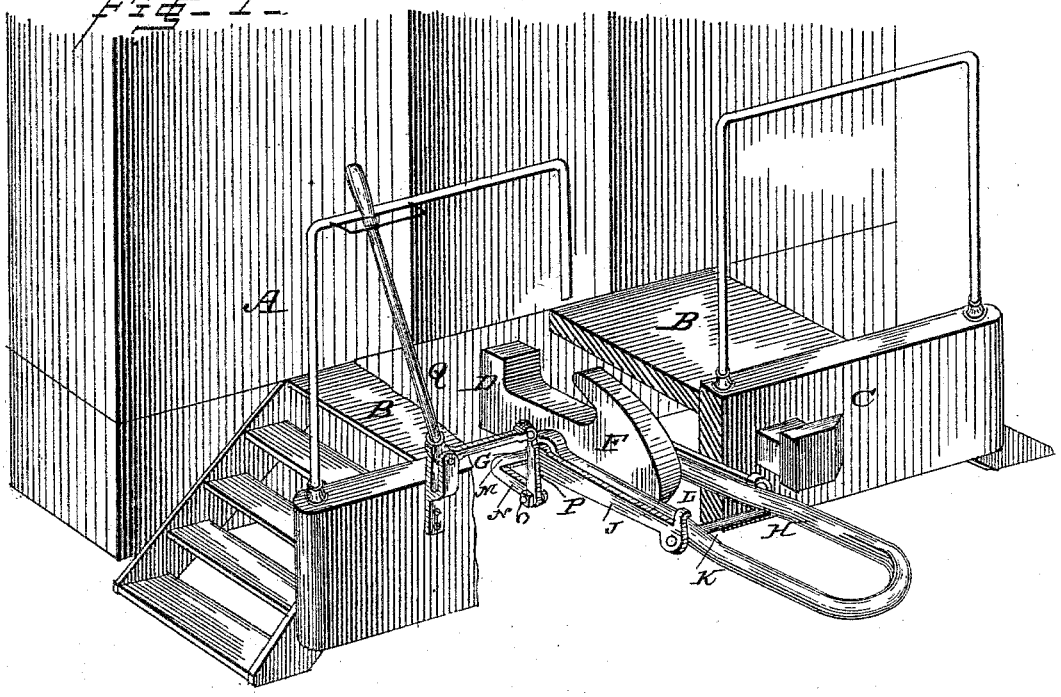


Fig. 2.

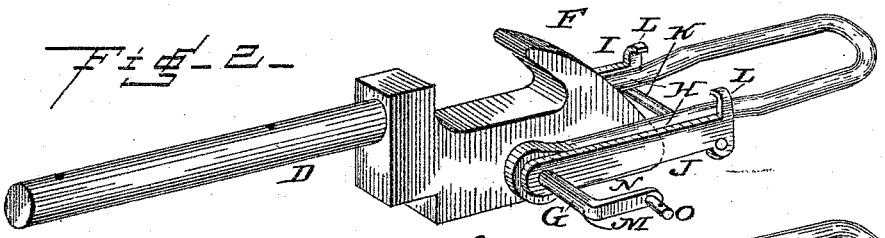


Fig. 3.

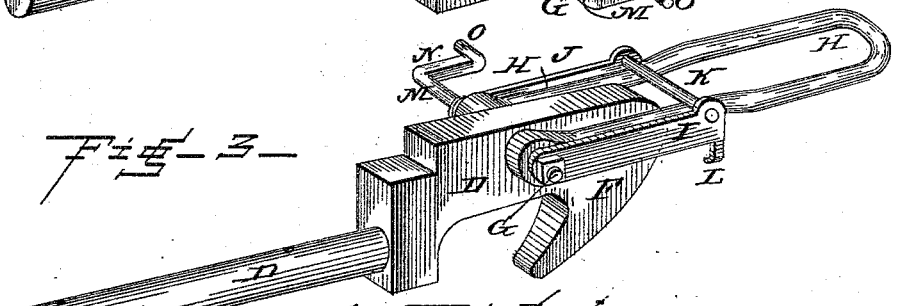
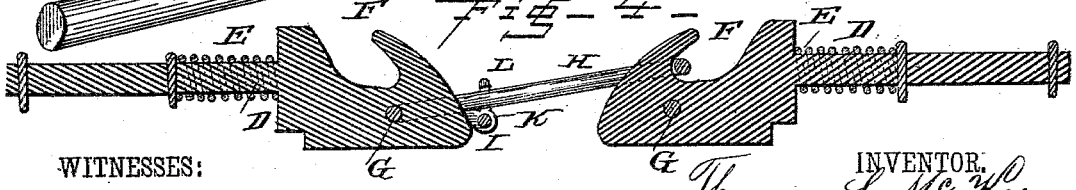


Fig. 4.



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CAR-COUPLING.

SPECIFICATION forming part of Letters Patent No. 301,737, dated July 8, 1884.

Application filed April 28, 1884. (No model.)

To all whom it may concern:

Be it known that I, THOMAS L. McKEEN, a citizen of the United States, and a resident of Easton, in the county of Northampton and State of Pennsylvania, have invented certain new and useful Improvements in Car-Couplings; and I do hereby declare that the following is a full, clear, and exact description of the invention, which will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, which form a part of this specification, and in which—

Figure 1 is a perspective view of the front part of a railway-car fitted with my improved automatic car-coupling, the car-platform being partly broken away to show the coupling. Fig. 2 is a perspective view of the coupling removed from the car. Fig. 3 is a similar view of the under side of the same, and Fig. 4 is a longitudinal sectional view showing two of the couplings in their coupled position.

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

My invention has relation to so-called "automatic" car-couplings, or "self-couplers," of that class which are adapted more especially for use upon passenger-cars and coal-cars; and it consists in the improved construction and combination of parts of a coupler of that class, as will be hereinafter more fully described and claimed.

In the accompanying drawings, A denotes the front part of a car, (which, in the present instance, is a passenger-car,) and B a portion of the platform of the same.

C denotes one of the buffers or bumpers, which may be of any desired construction; but I prefer to use the improved buffer which forms the subject of another application for Letters Patent.

D is the draw-bar, which is provided with a stout coiled spring, E, and has at its front end the coupling-hook F.

Inserted transversely through the front part of the hook is a movable bolt, G, upon which the arms of the link (shown at H) are hinged, so that the link will have a free up-and-down motion.

Fastened upon the link-bolt G outside of the sides of the link are two arms, I and J, the outer ends of which project a short distance in front of the hook, and are rigidly connected by a cross-bar, K. The outer ends of the arms I and J are bent to form the curved fingers L, which grasp and hold the link so as to form a guide and keeper for the same, the lower part of the link resting upon the cross-bar K between the arms I and J. The bolt G, upon which arms I and J are fastened, has a projection, M, which is bent at right angles to form the forwardly-projecting arm, N, which is parallel to the arm J and to the link. Arm N has at its outer end a pin or projection, O, adapted to be hinged to the lower end of the chain or rod P, by means of which the coupling is operated from the platform of the car by means of the lever Q.

From the foregoing description, taken in connection with the drawings, the manner of operating my improved automatic coupling will be readily understood. It will be seen that the arms I and J, with their connecting cross-bar K, and bent lips or fingers L L, serve the twofold purpose of uncoupling the link by elevating its free end sufficiently to throw it out of engagement with the hook opposite, and of so adjusting the elevation of the free end of the link as to cause it to properly engage the coupling opposite when the cars come together for the purpose of coupling them in making up a train. The bent fingers L L, by grasping the link on opposite sides, operate as a combined guide and keeper for the same, limiting its upward play relative to the arms I and J; and it will be seen that said arms, with their connecting cross-bar K, are actuated by operating arm N by means of its lever or operating mechanism P and Q.

Having thus described my invention, I claim and desire to secure by Letters Patent of the United States:

1. The combination, in an automatic car-coupling, of the coupling-hook F, bolt G, inserted transversely through the same, link or bail H, hinged with the inner ends of its arms upon bolt G, and parallel arms I and J, connected at their outer ends on opposite sides of the link by cross-bar K, adapted to support the free end of the link, and fastened with

their inner ends upon the bolt or opposite sides of the hook, substantially as set forth.

2. The combination, in an automatic car-coupling, of the coupling-hook F, bolt G, having projection M and arm N, link or bail H, hinged with the inner ends of its arms upon bolt G, parallel arms I and J, connected at their outer ends by cross-bar K, and having bent fingers L L, overlapping opposite sides of the link, and the mechanism for operating bolt G and its attachments, substantially as set forth.

In testimony that I claim the foregoing as my own I have hereunto affixed my signature in presence of two witnesses.

THOMAS L. McKEEN.

Witnesses:

AUGUST PETERSON,

ARTHUR L. MORSELL.