(No Model.)

F. W. PARSONS.

CAR COUPLING LINK.

No. 352,147. Patented Nov. 9, 1886.

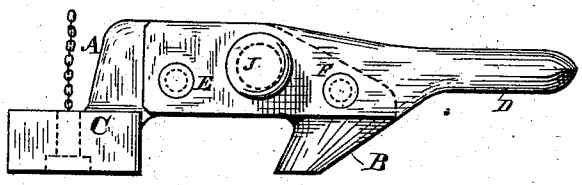

Fig. 1

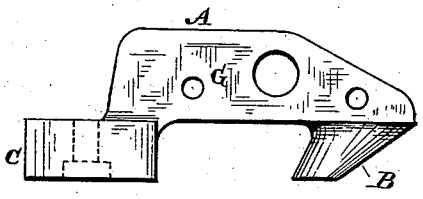

Fig. 3.

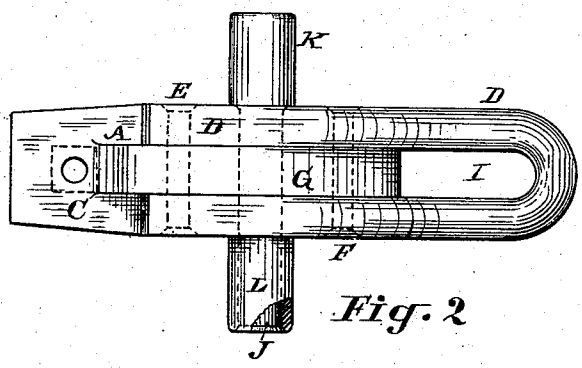

Fig. 2

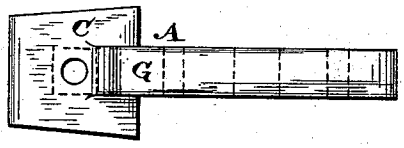

Fig. 4.

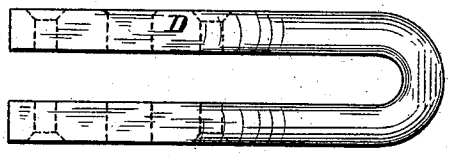

Fig. 5.

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CAR-COUPLING LINK.

SPECIFICATION forming part of Letters Patent No. 352,147, dated November 9, 1886.

Application filed August 23, 1886. Serial No. 211,589. (No model.)

To all whom it may concern:

Be it known that I, FRANCIS W. PARSONS, of Philadelphia, in the county of Philadelphia and State of Pennsylvania, have invented a certain new and Improved Railway-Car-Coupling Link; and I do hereby declare that the following is a full, clear, and complete description thereof.

The nature of my invention relates to its composite structure of wrought and cast metal for the purpose of securing greater strength and more durability and economy in use, as one part of the link is made of steel cast and another part of the loop of forged iron, both being bolted or otherwise fastened together, the trunnion of which passes through the said parts and is secured thereto.

In the following specification is a detailed description of said invention. With reference to the accompanying drawings, making a part thereof, Figure 1 is a side view. Fig. 2 is a top view of the link and trunnion; and Figs. 3, 4, and 5 are separate sections of said coupling-link, which will be fully described hereinafter separately and in combination.

Like letters of reference designate the same parts in the drawings and specification.

In Figs. 1 and 2, A represents a section of the link, provided with a hook, B, and having a weighted end, C. To this section is attached the loop D by lapping on the sides of the section A, as seen in the drawings. These two sections are secured together by means of bolts or rivets E F, or by other suitable means.

The section A consists of an arm, G, which extends from the weighted end C, and having a hook, B, Fig. 3, projecting from the under side, which is fitted in between the loop, as seen in Fig. 2, leaving an elongated opening, I, between the loop and the end of the arm G, as shown. The shank J of the trunnions is fitted to and passes through a hole in the loop D and section A, as indicated in Fig. 2. The trunnion K forms an integral part of the shank and its shoulder, and is fitted in close contact with the outside of the loop and the shank J, which projects from the opposite side of the loop, to which shank is fitted and secured the sleeve L, in close contact with the side of the loop, by any suitable means, which aids in securing the loop and arm upon the shank J between the shoulders of the trunnion and sleeve.

In addition to the attachment of the trunnions are two bolts or rivets, E F, for fastening the two parts of the link together, as before stated.

The section A, Figs. 3 and 4, of the link forms one entire piece, and is preferably made of cast-steel cast, while the loop is of forged iron or steel, and secured together as set forth, forming a composite metal link. The section A, being of the metal stated, has more tensile strength than if made of ordinary cast or forged iron of the same form, is more readily shaped and formed for combination with the loop D than by forging, and is also more homogeneous in its metalliferous character than when forged or of cast-iron. This is well understood in its practical use. There is also the advantage in this construction that in case either section of the link becomes worn out, or so injured as to require a new part, it can be removed and a new part replaced for it without the need of an entire new link. In removing one section from the other, the bolts or rivets E F and the trunnions are withdrawn for separating the two parts and the substituted part attached to the section by the means and in the manner before described.

The hook B is for the purpose of connection with the link of an opposite draw-bar in coupling cars.

Fig. 3 is an entire piece or section of the coupling-link, made of cast-steel, cast with a hook, B, and a weighted end, C. Fig. 4 is a top view of Fig. 3. It is best to make this section or part of such metal, because it has more tensile strength than if made of forged iron or steel of the same form, and it is more readily shaped for adaptation to the forged loop-part section, Fig. 5, than when the section Fig. 3 is forged for the attachment of the loop, Fig. 5. When either of said sections of the link is worn, it can be removed and replaced by a new one without requiring the substitution of an entire link, as either part thereof may be taken away separately.

What I claim as my invention, and desire to secure by Letters Patent, is—

1. A railway coupling-link consisting of the section A, made in one piece, and forming the arm G, hook B, and counter-weight, in combination with the loop D, provided with trunnions attached to the arm and link, as described, and bolts or rivets E F, as and for the purpose herein set forth.

2. In a railway-car-coupling link, the section A, formed in one piece, consisting of an arm, G, hook and counter-weight, and a loop, D, secured to said section with the said arm between the loop by means of bolts or rivets, in combination with the trunnions and shank thereof, in the manner as described, and for the purpose specified.

In testimony whereof I affix my signature in presence of two witnesses.

FRANCIS W. PARSONS.

Witnesses:
W. H. BURRIDGE,
L. BURRIDGE.