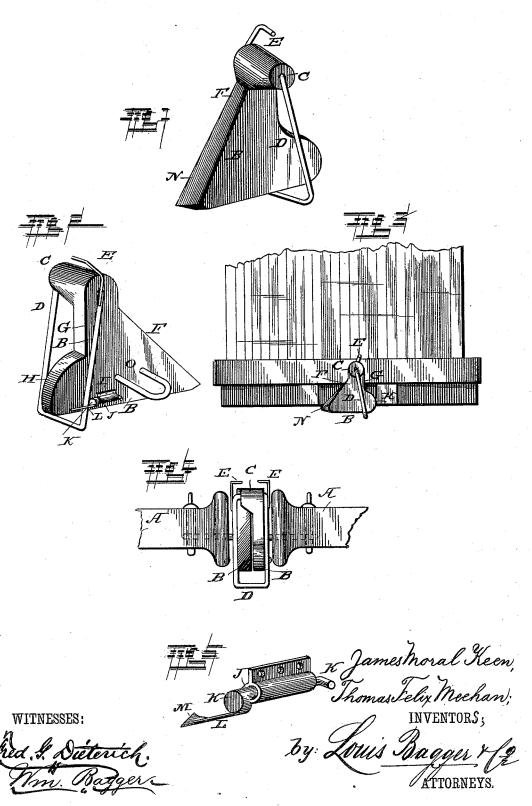
(No Model.)

J. M. KEEN & T. F. MEEHAN.

CAR COUPLING.

No. 307,659.

Patented Nov. 4, 1884.



United States Patent

JAMES MORAL KEEN AND THOMAS F. MEEHAN, OF DIGBY, NOVA SCOTIA, CANADA.

CAR-COUPLING.

SPECIFICATION forming part of Letters Patent No. 307,659, dated November 4, 1884.

Application filed August 19, 1884. (No model.)

To all whom it may concern:

Be it known that we, James Moral Keen and THOMAS FELIX MEEHAN, of Digby, in the county of Digby, Province of Nova Scotia, and Dominion of Canada, have invented certain new and useful Improvements in Car-Couplings; and we do hereby declare that the following is a full, clear, and exact description of the invention, which will enable others 10 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 our improved 55 car-coupling. Fig. 2 is a perspective rear view of the same. Fig. 3 is a front view of a car equipped with our improved coupling, showing the same in position for coupling. Fig. 4 is a side view showing the draw-heads of two 20 cars connected by our improved coupling; and Fig. 5 is a detail view of the latch.

The same letters refer to the same parts in

all the figures.

This invention relates to car-couplings; and 25 it has for its object to provide a device which shall be simple in construction, inexpensive, and which may be readily applied to drawheads of ordinary construction for the purpose of rendering the same automatic in operation.

To this end the invention consists in the improved construction and arrangement of parts, which will be hereinafter fully described, and particularly pointed out in the claims.

In the drawings hereto annexed, A desig-35 nates the draw-head of an ordinary pin-andlink coupling to which our improved auto-

matic coupling device is attached.

Our improved attachment may be described as consisting, mainly, of a plate, B, approxi-40 mately triangular in shape, having a horizontal lower edge, B', and provided at its upper corner with a forwardly-projecting lug, C, forming a bearing for a pivoted link or bail, D, which is provided at its upper rear corner with an arm or handle, E, which, when the link is raised, as in uncoupling, is adapted to rest upon or against the inclined side, F, of the plate, so as to sustain the link in its raised position. The opposite side, G, of the plate 50 is nearly vertical, and provided at or near its lower end with a bulge or projection, H, behind which the link or bail normally rests.

Pivoted upon the rear side of the plate B, adjoining the bulge H, is a latch, I, arranged in a horizontal bearing, and consisting of a 55 short shaft or pin, J, having at its inner end a stop or handle, K, and at its outer end an eccentric, K', at right angles, or nearly so, to the said stop, and provided with an arm, L, having a beveled hook, M, at its outer end. 60 This hook serves, when the cars are coupled, to retain the coupling link or bail in position and prevent it from being accidentally uncoupled by the motion of the cars. The outer or inclined side, F, of the plate B is beveled on 65 its front side, as shown at N, so as to cause the links of opposite draw-heads to engage the plates automatically when the cars come together. The rear sides of the plates B are provided with rearwardly-extending bails or 70 staples O, adapted to enter the mouths of the draw-heads A, in which they are secured by means of ordinary coupling-pins, after the manner of ordinary pin-and-link couplings.

The operation and advantages of this in- 75 vention will be readily understood from the foregoing description, taken in connection with the drawings hereto annexed.

Our improved coupling attachment is readily attached, in a moment's time, to draw- 80 heads of the old-fashioned kind. The links are, normally, allowed to hang down, engaging the latches I. When the cars come together, the link of each coupling is first pressed slightly in a rearward direction, thus forcing 85 the hooked arm of the latch back to a vertical position and disengaging the hook from the link, which is now, by engaging the bevel N of the plate of the opposite draw-head, forced outward and caused to engage the corner of 90 the inclined side of said plate, thus completing the coupling. At the moment this takes place the links will automatically engage the hooked latches of the opposite plates, whereby they are retained securely in position.

In order to uncouple the cars it is only necessary to release the links from the latches I and swing them back until they rest upon the

This improved car-coupling is exceedingly 100

simple in construction, certain in its action, and may be easily and quickly applied to or removed from the old-fashioned draw-heads without making any change in the construction of the latter.

Having thus described our invention, we claim and desire to secure by Letters Patent of

the United States-

1. In an automatic coupling attachment for ordinary draw-heads, the combination of an approximately-triangular plate with a link or bail journaled at the upper corner of the plate, substantially as and for the purpose set forth.

2. An automatic coupling attachment comprising an approximately - triangular plate having a link or bail journaled at its upper corner, and provided with a rearwardly-extending bail or staple, substantially as and for

the purpose set forth.

3. In a car-coupling, the combination, with an approximately-triangular plate attachable to an ordinary draw-head, of a link or bail pivoted at the upper corner of the said plate, and having a supporting arm at its upper rear corner, substantially as and for the purpose set forth.

4. In a car-coupling, the combination of the described triangular plate having an inclined beveled side, a straight side provided with a bulge at its lower end, a forwardly-projecting 30 lug at its upper corner, and a link or bail journaled in the said lug, substantially as and for the purpose set forth.

5. In a car-coupling, the combination of the described triangular plate having a beveled 35 inclined side, a vertical side provided with a bulge at its lower end, and a link journaled at its upper corner, with a latch arranged upon the rear side of the said plate, and consisting of a horizontal rock-shaft having a 40 stop at its inner end, and at its outer end an eccentric provided with an arm having a beveled hook, all arranged and operating substantially as and for the purpose set forth.

In testimony that we claim the foregoing as 45 our own we have hereunto affixed our signa-

tures in presence of two witnesses.

JAMES MORAL KEEN. THOMAS F. MEEHAN.

Witnesses:

THOMAS CALEB SHREVE, WILLIAM FERDINAND MEEHAN.