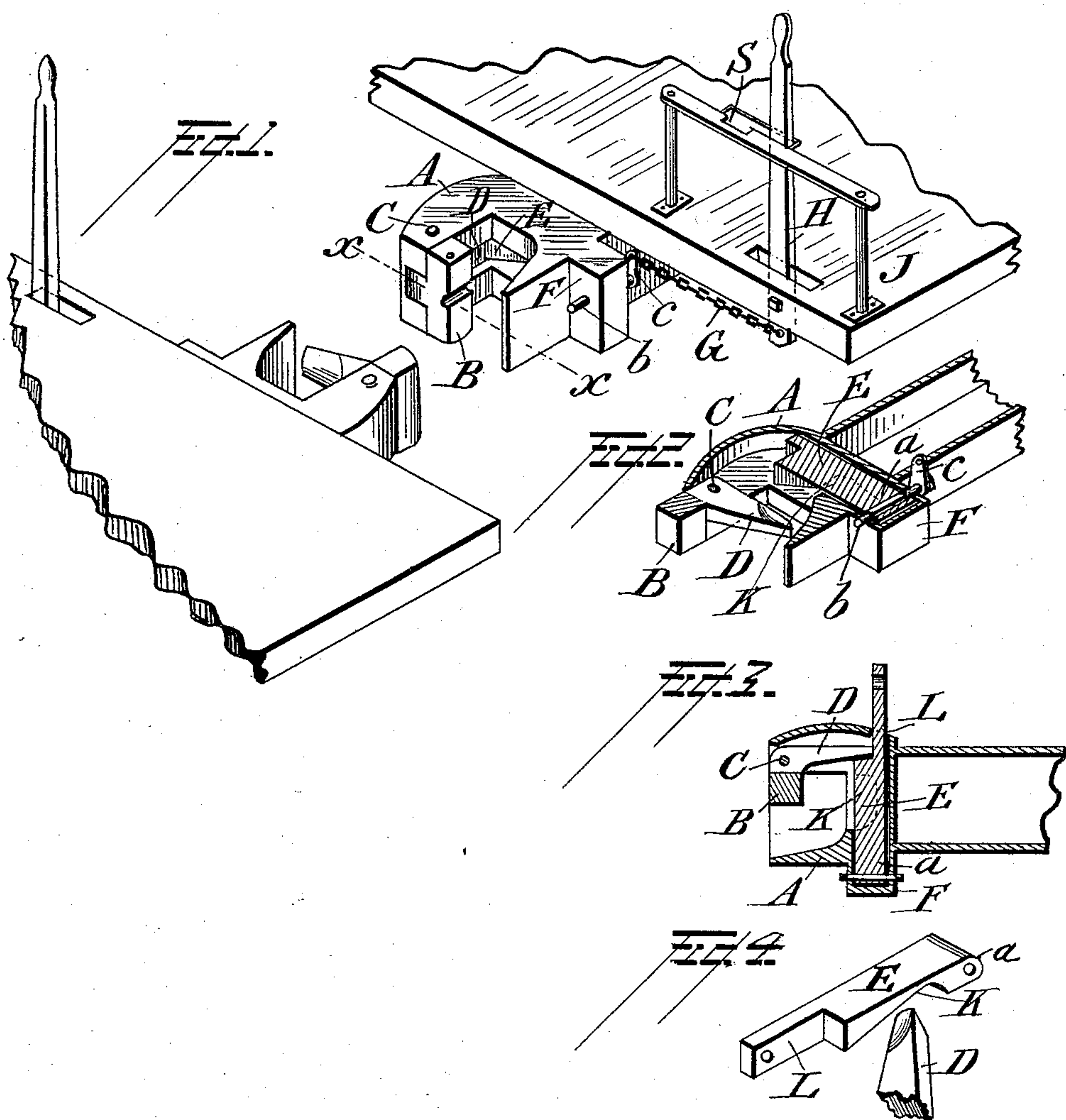


(No Model.)

D. LIPPY.  
CAR COUPLING.

No. 495,158.

Patented Apr. 11, 1893.



*Attest:*

J. H. Schott

Calvert Shires

*Inventor*

David Lippes

by his Attorneys

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# UNITED STATES PATENT OFFICE.

DAVID LIPPY, OF MANSFIELD, ASSIGNOR OF ONE-HALF TO DANIEL L. SPOTTS, OF CANTON, OHIO.

## CAR-COUPLING.

SPECIFICATION forming part of Letters Patent No. 495,158, dated April 11, 1893.

Application filed October 28, 1892. Serial No. 450,215. (No model.)

*To all whom it may concern:*

Be it known that I, DAVID LIPPY, a citizen of the United States, residing at Mansfield, in the county of Richland and State of Ohio, have invented certain new and useful Improvements in Car-Couplings; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

My invention relates to certain new and useful improvements in car couplings, and is designed for use upon all classes of cars, as Pullman coaches, passenger cars or freight cars, and it consists mainly of a drawhead and novel construction of lever arm and latch, as will be fully described hereinafter.

In the accompanying drawings, Figure 1 is a perspective view of my improved car coupling, showing end portions of passenger cars with the coupling attached thereto. Fig. 2 is a horizontal section in perspective taken in line  $x-x$  of Fig. 1, showing the construction of the drawhead, latch and lever arm. Fig. 3 is a topsectional plan view of the drawhead, latch and lever arm as constructed for freight cars. Fig. 4 is a perspective view of the latch detached, showing the general construction of the same.

In the accompanying drawings, A represents the drawhead which is chambered in its upper portion to receive a latch; B a locking-head adapted to rotate upon a suitable pivot pin C, and provided with a lever arm D, and E a latch which is pivoted at the end  $a$  in the extension F forming part of the drawhead A by a bolt  $b$ , that portion of the bolt which passes through the latch to prevent the same from turning being square.

$c$  is a lever which is secured to the inner end of the pivot pin  $b$ , to which lever is attached a chain connection G connected with the levers  $c$  and H, the said lever H being pivoted in the car platform J.

The latch E is constructed with a downwardly inclined or slanting opening or passage K upon its under side, to allow the end of the lever D to pass under the said latch in

raising the same when coupling two cars together. This is fully illustrated in Figs. 1, 2 and 5.

A lever N is secured by suitable fastening means to the end of the car; this construction is fully shown in Figs. 3, and 4.

The operation is substantially as follows: As the lever arm swings backward when the locking head is being closed, the end of the lever is caused to pass into the inclined or slanting opening or passage formed in the under side of the latch, as shown in Fig. 4, and by the continued movement of the arm the latch is raised, until it is high enough to permit the arm to pass beneath it into the recess behind it. The latch being unsupported after the passage of the arm, it returns to its normal position and thus locks the lever arm, as shown in Fig. 3. The lever arm may be released at any time by the operation of the lever H, and the latch can be made stationary after it is raised by placing the lever H in the notch S, thereby preventing the car from coupling during the operation of switching. The same result may be accomplished by the movement of the bell crank. To raise the latch the lever T is pulled up and slid upon the angle plate V and rested thereon.

The special advantages of my improved construction of car coupling lie in the fact that it is automatic in action, simple in construction, and efficient in operation.

What I claim as my invention is—

1. In a car coupling, in combination, a drawhead having an extended portion which is adapted to receive a latch portion of a combined latch and lever, the lever portion of said combined latch and lever being formed by cutting away a portion of the same, and a pivot pin passing through the said extended portion and connecting the latch portion of the combined latch and lever with a chain connection attached to a lever secured to a car, substantially as described.

2. In a car coupling, in combination, a drawhead having an extended portion F, a combined latch and lever having its latch



portion secured within the said recess and its lever portion passed through an aperture formed in the opposite side of the drawhead, and a pivot pin passing through the said extended portion and connecting the latch portion of the combined latch and lever with connecting means attached to a lever secured to a car, substantially as described.

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

DAVID LIPPY.

Witnesses:

T. R. ROBISON,  
GEO. W. STATLER.