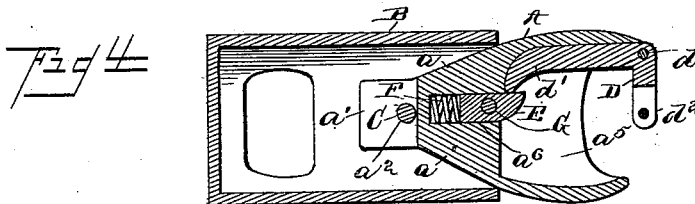
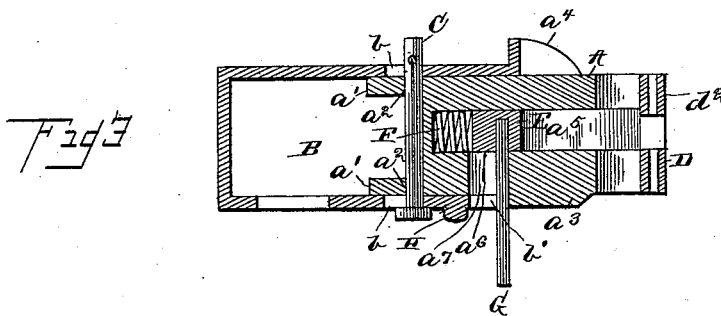
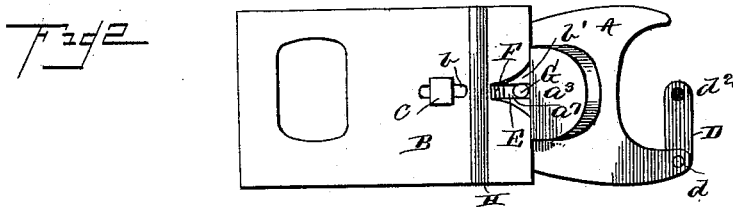
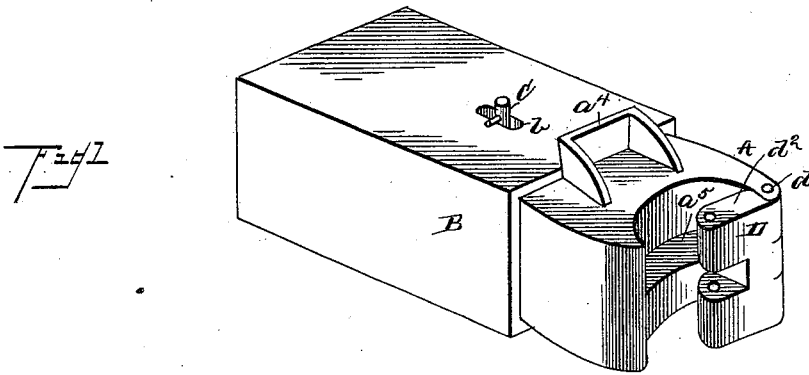


(No Model.)

T. L. RIVERS.
CAR COUPLING.

No. 421,616.

Patented Feb. 18, 1890.



Witnesses

Witnesses
John Amire
St. J. Riley By his Attorneys,

Inventor

Thomas L. Rivers

Chas Snow & Co

UNITED STATES PATENT OFFICE.

THOMAS L. RIVERS, OF NEWARK, NEW JERSEY, ASSIGNOR OF ONE-FOURTH
TO CLAUDE M. RIVERS, OF SAME PLACE.

CAR-COUPLING.

SPECIFICATION forming part of Letters Patent No. 421,616, dated February 18, 1890.

Application filed June 22, 1889. Serial No. 315,195. (No model.)

To all whom it may concern:

Be it known that I, THOMAS L. RIVERS, a citizen of the United States, residing at Newark, in the county of Essex and State of New Jersey, have invented new and useful Twin-Jaw Couplings, of which the following is a specification.

My invention relates to improvements in twin-jaw couplings.

10 The object of the present invention is to produce a car-coupling of simple and inexpensive construction that will automatically couple cars upon their coming together and be capable of limited longitudinal and lateral movement to enable cars to be started successively and facilitate their rounding curves.

15 The invention consists in the construction and novel combination and arrangement of parts hereinafter fully described, and illustrated in the accompanying drawings, and pointed out in the claims hereto appended.

20 In the drawings, Figure 1 is a perspective view of a car-coupling constructed in accordance with the invention. Fig. 2 is a reverse plan view. Fig. 3 is a central vertical longitudinal sectional view, and Fig. 4 is a horizontal sectional view.

Referring to the accompanying drawings, 30 A designates a coupler-head, which is pivoted in a socket or draw-head B, and is provided with rearward projection having inclined sides a , which gradually reduces its width and makes it capable of limited lateral movement 35 within the socket or draw-head B, whereby the coupling is rendered extremely flexible and cars are enabled to round curves without liability of cutting the wheels or the rails. The coupler-head A is provided at its top and bottom with rearward-extending flanges a' , and has perforations a^2 , through which 40 passes a pin C, that is inserted at the bottom, and is keyed at the top and pivots the coupler-head A to the socket or draw-head B, and the socket is provided with longitudinal slots b , which permit limited longitudinal movement of the coupler-head and enable cars of a train to be successively started. The bottom of the coupler-head is provided with a 50 plate a^3 and the top with a projecting frame a^4 , both of which abut against the socket

or draw-head B when the cars are being backed and prevent too far rearward movement of the coupler-head within the socket or draw-head B. The front of the coupler-head has a transverse opening a^5 , which communicates with a longitudinal recess a^6 , and the hook D is hinged by a pintle d to one side of the coupler-head, and has its rearward-extending arm working in the recess a^6 , and 60 adapted to be engaged by a sliding bolt E to hold the front portion d^2 of the hook across the front of the coupler-head and keep the cars coupled, as will be readily understood.

The bolt E is actuated by a spiral spring F, 65 and has depending from it a rod G, which operates in a slot a^7 , communicating with the recess a^6 , and is adapted to withdraw the bolt from engagement with the arm d' to uncouple the cars. The front of the bolt E is beveled, 70 and when the cars come together the arm d is forced against the bolt, which is depressed sufficiently to allow the arm to pass, but which spring out and lock the arm against the side of the coupler-head, thereby coupling 75 the cars. A V-shaped recess b' is provided in the bottom of the socket or draw-head B to enable the rod G to be operated, and a bar H is secured across the socket between the recess and the slot b to strengthen the socket 80 at that point.

The socket B is secured between the timbers of a car, and is designed to act as a draw-bar and have slight longitudinal movement, and is provided in its lower face near 85 its rear end with an opening b to permit access to the interior to key the socket to suitable bars.

From the foregoing description and the accompanying drawings the construction, operation, and advantages of the invention will readily be understood. 90

What I claim is—

1. A car-coupler comprising the socket or draw-head, provided with longitudinal slots, 95 and a coupler-head having a rearward projection provided with inclined sides, whereby the coupler-head is capable of limited longitudinal and lateral movement within the socket, substantially as described. 100

2. A car-coupler comprising the socket or draw-head the coupler-head pivoted thereto

and provided with a transverse opening and a longitudinal recess, the hook hinged to the coupler-head and having its arm arranged within the said opening, the sliding bolt having the beveled end, the spring, and the rod depending from the bolt and adapted to withdraw the same from engagement with the coupler-head.

3. A car-coupler comprising the socket or draw-head provided with longitudinal slots *b* and a V-shaped recess *b'*, the coupler-head provided with the perforated flanges *a'*, and having the transverse opening and longitudinal recess, the hook hinged to the coupler-head and having its arm arranged within the opening, and the spring-actuated bolt adapted to engage said arm and provided with a depending rod, substantially as described.

4. A car-coupler having its coupler-head provided with a hinged hook D, and having a spring-actuated bolt E to engage the hook, and the rod G, connected with the bolt to operate the same, as set forth.

5. The combination of the rectangular socket having the open front end, and the coupler-head pivoted in said socket and having rearward-inclined sides and capable of limited longitudinal and lateral movement, substantially as described.

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

THOMAS L. RIVERS.

Witnesses:

WM. TERHUNE,
GEO. L. MAHR.