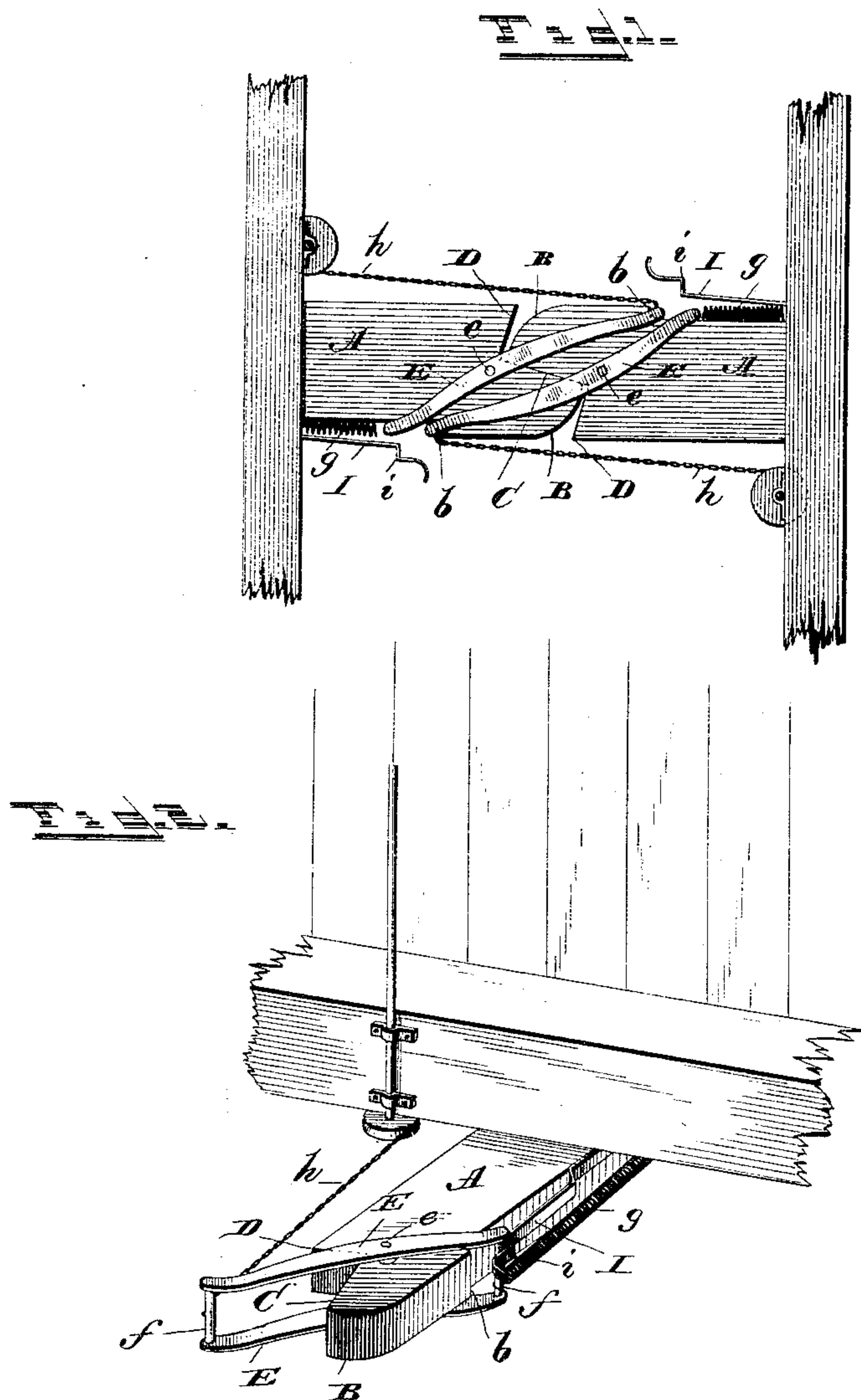


(No Model.)

A. S. NEAL.
CAR COUPLING.

No. 407,231.

Patented July 16, 1889.



Adam S. Neal.

Inventor

Witnesses

G. S. Elliott.

E. W. Johnson

By his Attorneys

[Signature]

UNITED STATES PATENT OFFICE.

ADAM S. NEAL, OF RICHMOND, TEXAS.

CAR-COUPLING.

SPECIFICATION forming part of Letters Patent No. 407,231, dated July 16, 1889.

Application filed April 25, 1889. Serial No. 308,582. (No model.)

To all whom it may concern:

Be it known that I, ADAM S. NEAL, a citizen of the United States of America, residing at Richmond, in the county of Fort Bend and State of Texas, have invented certain new and useful Improvements in Car-Couplers; 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, reference being had to the accompanying drawings, and to letters or figures of reference marked thereon, which form a part of this specification.

My invention relates to certain new and useful improvements in that class of car-couplers which are provided with twin jaws and pivoted bails; and it consists in the construction and combination of the parts, as will be hereinafter fully set forth and claimed.

In the accompanying drawings, Figure 1 is a plan view of a car-coupler constructed in accordance with my invention, and Fig. 2 is a perspective view.

A A refer to the draw-heads, the ends of which are similarly constructed to provide forwardly-projecting portions B, the outer edges of which are rounded and provided with notches *b*, the opposite face being inclined, as at C, and provided with an abutting face D. The draw-heads are provided with bails E E, which are pivoted thereto at the points *e*, or near the junction of the faces C and D. These bails E are provided with connecting-pieces *f f*, and the sides thereof are curved slightly, as shown. To one of the cross-bars of the bail is secured a spiral spring *g*, the opposite end of which is attached to the draw-head, and this spring has a tendency to draw the cross-bar to which it is attached against the side of the draw-head, so that when the draw-heads come together the opposite cross-bar of the bail will engage the notch *b* on the opposite draw-head. The outer cross-bar of the bail has attached thereto a chain or flexible connection *h*, which is connected to a wheel adapted to be operated from the top of the car.

In uncoupling the cars one of the chains *h* is drawn upon, which will disengage the cross-bar to which it is attached from the notch *b*,

the opposite end of the bail releasing the bail of the opposite draw-head.

I I refer to catches which are carried by the draw-heads and have their ends bent, as shown, to provide catches *i*, with which the rear cross-bar of the bail may engage. The outer end of the spring-catch is curved outwardly and rounded, so that the cross-bar *f* may be passed over the end thereof to engage with the notch *i*.

With a car-coupler constructed as hereinbefore described the coupling will be automatic, as when the parts are organized as shown in Fig. 1 and the draw-heads brought together the cross-bars of the bails will ride upon the curved portions B B of the draw-head and enter the notches *b*, to hold the draw-heads securely together.

When it is desired that the cars should not couple when they come together, the cross-bars of the bails may be caused to engage with the catch I, which will hold the bails from engaging with the notches *b*.

Having thus described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. In a car-coupler, the combination of the draw-heads A, provided with forwardly-projecting portions having curved faces B and notches *b* in the rear thereof, bails E, pivoted centrally on vertical pins passing through the center of the draw-heads, springs exerting a rearward pressure on the rear ends of the bails, and chains secured to the forward ends of the bails to move them in opposition to the pressure of their springs, substantially as shown, and for the purpose set forth.

2. The combination, in a car-coupler, of the draw-heads A, provided with forwardly-projecting portions curved, as shown, notches *b*, located in the rear of said curved portions, inclined faces C and abutting faces D, bails E, pivoted centrally on vertical pins passing through the draw-heads forward of the notches *b*, springs *g*, exerting a rearward pressure on the rear ends of the bails, and chains to move the bails in opposition to the pressure of their springs, substantially as described.

3. In a car-coupler, the combination of the draw-heads the front ends of which are rounded on one side, notches *b*, formed in rear

of the rounded faces, bails E, pivoted on vertical pins passing centrally through the draw-heads, springs exerting a rearward pressure on the rear ends of the bails, and spring-
5 catches to engage the rear ends of the bails and suspend the operation of the coupler, substantially as described.

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

ADAM S. NEAL.

Witnesses:

T. W. MATTHEWS,
J. J. CHENEY.