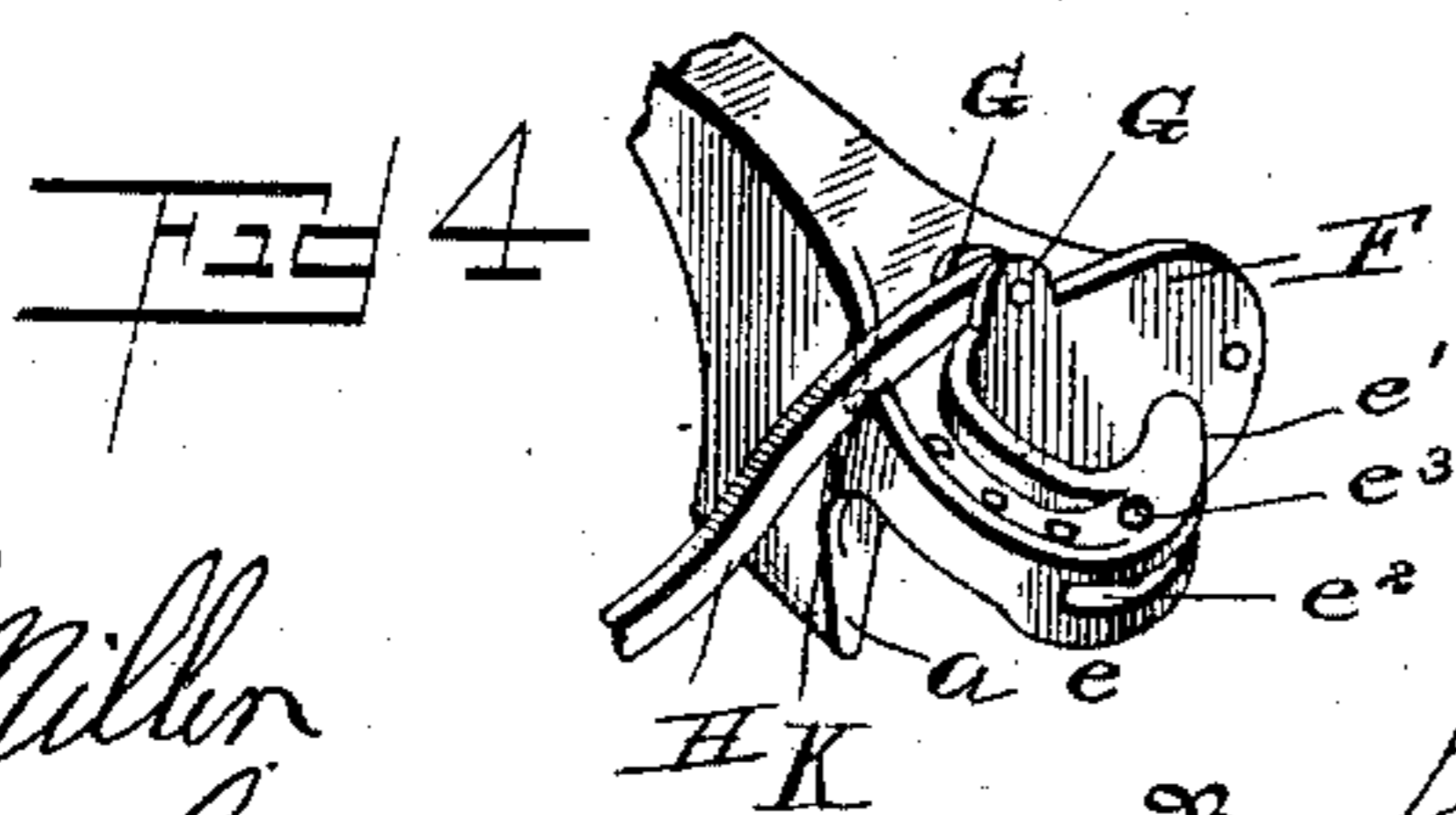
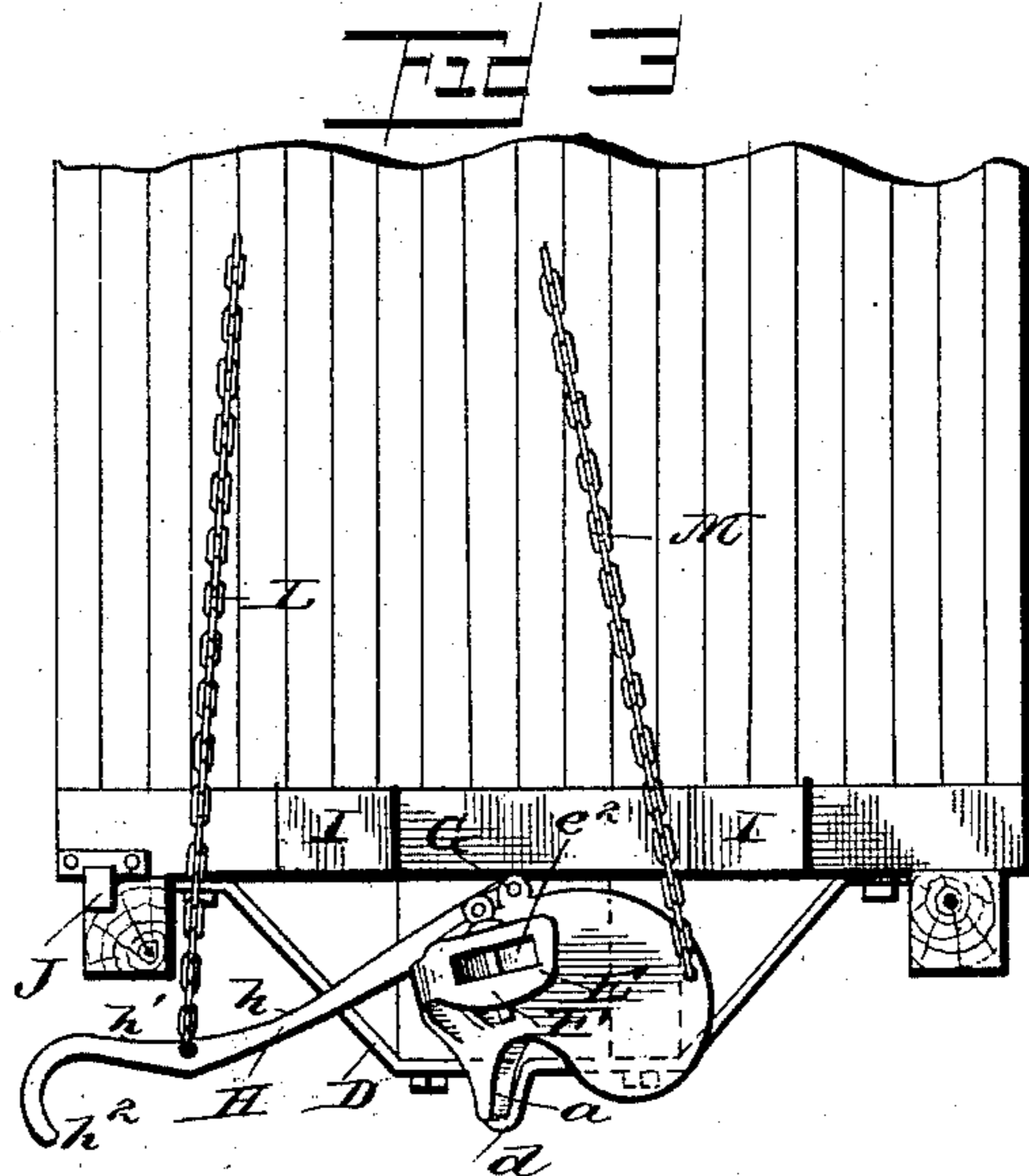
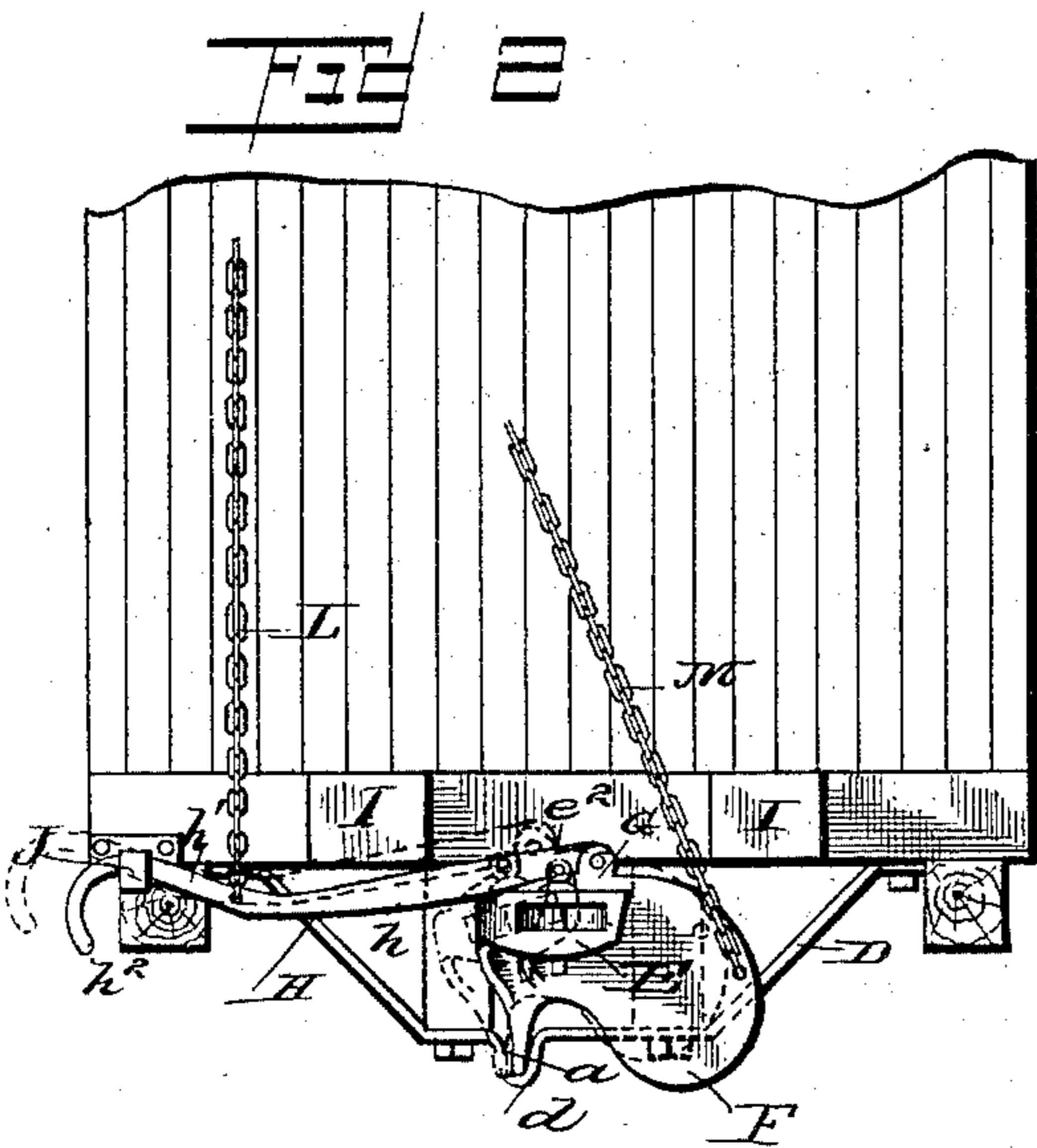
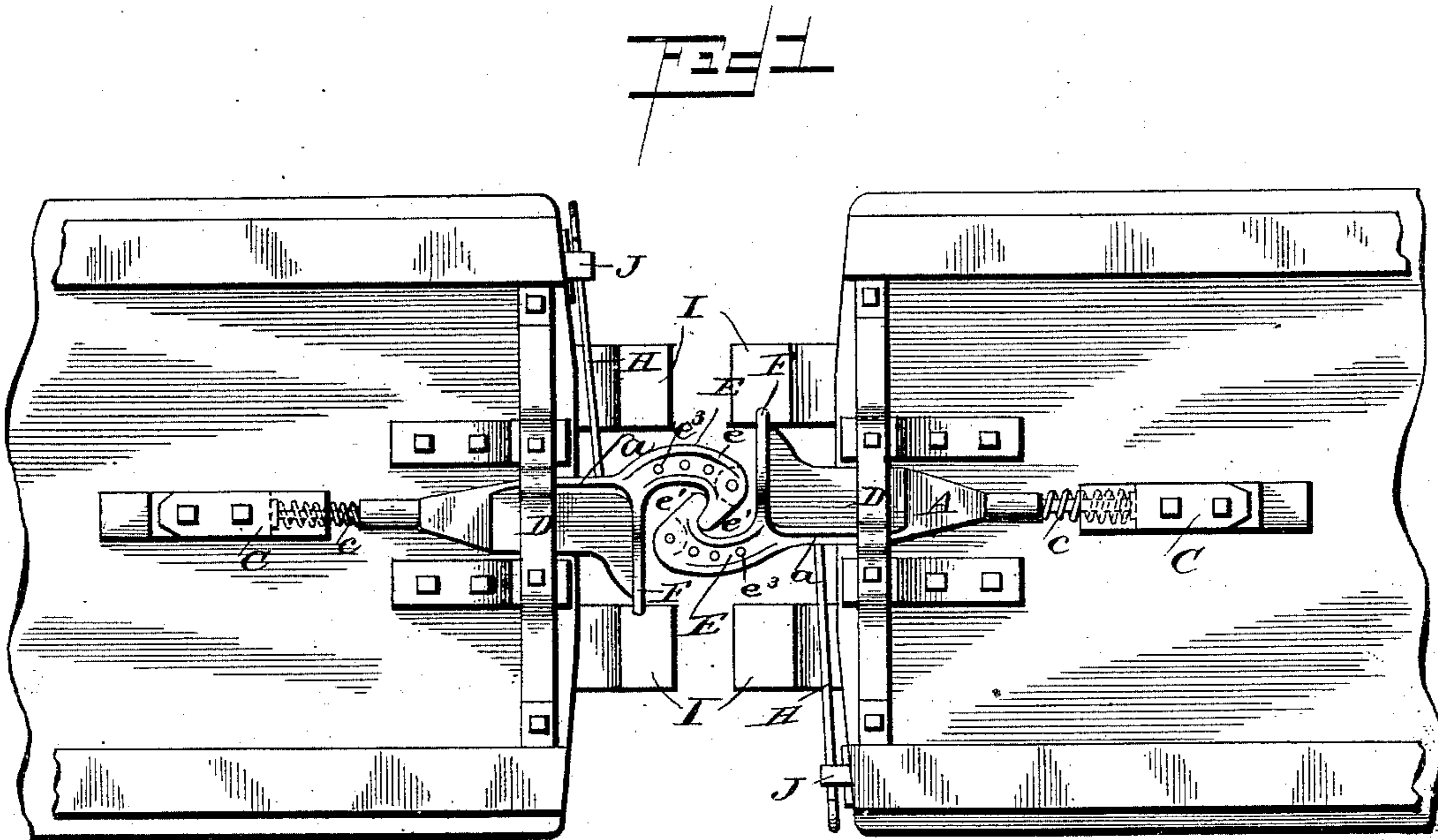


(No Model.)

O. C. HARRIS.  
CAR COUPLING.

No. 473,574.

Patented Apr. 26, 1892.



Witnesses

Chas. F. Miller  
B. B. Verle

Inventor

Orrin C. Harris

By his Attorney

Frank V. Johns

# UNITED STATES PATENT OFFICE.

ORRIN C. HARRIS, OF LITTLE FALLS, NEW YORK, ASSIGNOR OF ONE-HALF  
TO CHARLES L. PETREE, OF SAME PLACE.

## CAR-COUPLING.

SPECIFICATION forming part of Letters Patent No. 473,574, dated April 26, 1892.

Application filed August 17, 1891. Serial No. 402,887. (No model.)

*To all whom it may concern:*

Be it known that I, ORRIN C. HARRIS, a citizen of the United States, residing at Little Falls, in the county of Herkimer and State of New York, 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.

This invention relates to car-couplers and is in the nature of an improvement on the coupling for which Letters Patent were granted me on the 7th day of April, 1891, No. 450,015.

The object of the present invention is to provide improved means for operating the coupling to couple or uncouple the cars; and it consists in the novel construction hereinafter fully described, and afterward pointed out in the claims, due reference being had to the accompanying drawings, forming a part of this specification, wherein—

Figure 1 is a front view of my improved coupling; Fig. 2, a similar view, showing the coupling in an uncoupled position; Fig. 3, a bottom plan view, and Fig. 4 a transverse section.

Referring to said drawings, the letter A indicates the draw-bar, which is arranged beneath the car, the rear end of said bar being arranged in a bracket C, secured to the under side of the car and provided with springs *c c*. The forward end of the draw-bar rests in a bracket D, secured to the under side of the car, and said bracket at one side is provided with a vertical depression *d*. The draw-bar at one side thereof is provided with a vertically-depending flange *a*, which rests in the depression *d*, and upon said flange the draw-bar rocks or oscillates in the act of coupling or uncoupling. The depression *d* in a bracket D and the depending flange *a* of the draw-bar are so arranged that the center upon which the draw-bar and draw-head rock is to one side of the longitudinal center line of said draw-bar. The draw-head E, which is preferably formed in one piece with the draw-bar, consists of a hooked portion *e* and a buffer portion F, formed integral with the hooked portion at its juncture with the draw-bar A. The nose of the hook is beveled both forwardly

and downwardly, as at *e'*, and is provided with a horizontal slot *e<sup>2</sup>* and perforations *e<sup>3</sup>*, by means of which and a coupling-pin the coupling can be used with a car furnished with the ordinary pin-and-link coupling. The coupling, as above described, is substantially the coupling shown and described in my Letters Patent before named. The upper side of the draw-head is provided with two ears G G, between which is pivoted one of a lever H. Said lever is depressed or curved downwardly, as at *h*, in order to permit the lever to pass under the bumper or "dead-block" I, secured to the platform, and said bumper or dead-block is preferably recessed upon its under side to afford additional room for the lever when it is lifted to uncouple the cars, and at its free end said lever is bent upwardly, forming an incline *h'*, and is thence curved downwardly to form a handle *h<sup>2</sup>*. The end of the lever rests in a bracket J, which supports said lever in a substantially horizontal position, and when in this position the inclined part *h'* of the lever will rest against the bracket and the lever will by gravity operate to throw the draw-head in a position to couple and maintain said coupling in a coupled position. By removing the lever from the bracket J and allowing it to drop the weight of the lever will operate to uncouple the coupling, and in order to prevent the lever when in this position from swinging back and forth I form a recess K in one side of the draw-head, in which the lever drops when removed from the bracket J. The coupling may also be operated to uncouple by taking hold of the handle and drawing the said lever out from the car, as shown in dotted lines, Fig. 2.

If desired, the chain L may be attached to the lever H and extend to the top of the car, and a similar chain M, attached to the buffer F, by means of which the coupling can be operated from top of said car or platform.

Having described my invention, what I claim is—

1. The combination, with the draw-bar having at one side a depending flange located at one side of the longitudinal center of said draw-bar and resting in a depression formed in a bracket secured to the car and carrying a hook-shaped draw-head, of a lever pivoted

to said draw-head and at its free end inclined upwardly and resting in a bracket secured to the end of the car, all constructed, arranged, and operating substantially as shown and described.

2. The combination, with the draw-bar carrying the hook-shaped rocking draw-head, of a lever pivoted thereto and having its free end resting in a bracket secured to the end of the car, said lever when released from the bracket dropping by gravity and uncoupling the draw-head, all constructed, arranged, and operating substantially as shown and described.

3. The combination, with the draw-bar carrying the hook-shaped rocking draw-head, of the gravitating lever pivoted to said draw-head and having its free end resting in a bracket secured to the end of the car, all constructed, arranged, and operating substantially as shown and described, as and for the purpose set forth.

4. The combination, with the hook-shaped rocking draw-head E, of the lever H, pivoted thereto and bent downwardly, as at *h*, and upwardly inclined at its free end, as at *h'*,

resting in a bracket secured to the end of the car, substantially as shown and described.

5. The combination, with the hook-shaped rocking draw-head E, of the lever H, pivoted thereto and bent downwardly, as at *h*, said lever at its free end being upwardly inclined, as at *h'*, and bent to form a handle *h*<sup>2</sup>, and a bracket J, secured to the end of the car and engaged by the inclined end of the lever, serving to support the same in a horizontal position, substantially as shown and described, and for the purpose specified.

6. The combination, with the hook-shaped rocking draw-head E, of the lever H, pivoted at one end to said draw-head and having its other end upwardly inclined and resting within a bracket secured to the end of the car, the said draw-head at one side being recessed, as at K, substantially as shown and described, as and for the purpose specified.

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

ORRIN C. HARRIS.

Witnesses:

E. J. COFFIN,

CHARLES L. PETREE.