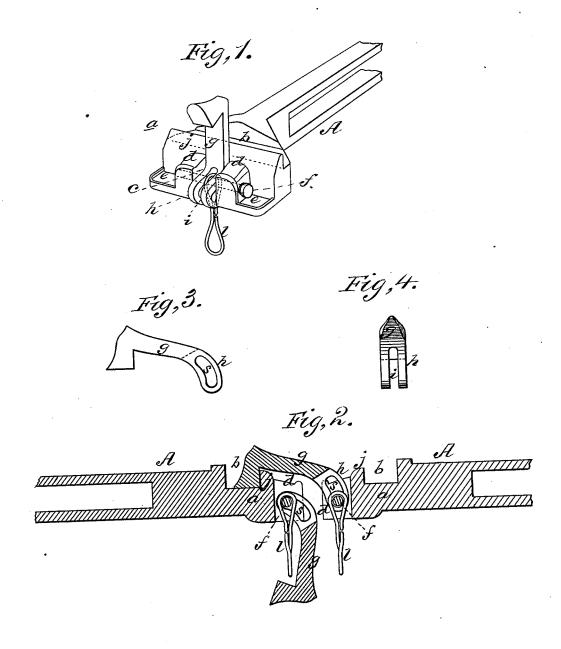
J. J. CHRISTIE. Car-Coupling.

No. 214,364.

Patented April 15, 1879.



witnesses Lillette Anderson. Grauk J Chasi. John J. Christie
By & W. auderson.
ATTORNEY

UNITED STATES PATENT OFFICE.

JOHN J. CHRISTIE, OF HENDERSON, TENNESSEE, ASSIGNOR OF ONE-HALF HIS RIGHT TO JOHN WILLIAM KIRK, OF SAME PLACE.

IMPROVEMENT IN CAR-COUPLINGS.

Specification forming part of Letters Patent No. 214,364, dated April 15, 1879; application filed February 24, 1879.

To all whom it may concern:

Be it known that I, JOHN JOSEPH CHRISTIE, of Henderson, in the county of Madison and State of Tennessee, have invented a new and valuable Improvement in Car-Couplings; and I do hereby declare that the following is a full, clear, and exact description of the construction and operation of the same, reference being had to the annexed drawings, making a part of this specification, and to the letters and figures of reference marked thereon.

Figure 1 of the drawings is a representation of a perspective view of my improved coupling. Fig. 2 is a longitudinal section of the draw-bars coupled, and Figs. 3 and 4 are de-

tails.

This invention has relation to improvements in car-couplers; and the nature of the invention consists in the arrangement and novel construction of a draw-bar having a laterallyextended head, a transverse rectangular groove across the said lateral extension, a vertical notch in the face of said extension, a hook pivoted to vibrate vertically in said notch, and having an oblong slot in its heel, as will

be hereinafter more fully set forth.

In the annexed drawings, the letter A designates the body of the draw-bar, designed to be secured to the car-frame in the usual manner, and having upon its front end a laterallyextended head, a. This is usually of triangular form, the front end of the same being at right angles to the length of the car. Extending transversely across this head is a rectangular groove, b, of suitable width and depth, the object of which will be hereinafter set forth.

c designates a vertical notch formed in the front edge of the head, and bounded at each side by the bunter-heads d. The lower edges of these bunters are connected with the body of the head by the parts e, having rounded front edges, so that the couplers will have a rolling bearing on each other. In between the bunters d is secured, by means of a pin, f, passing horizontally through the same, a strong hook, g, which, being engaged in the groove b of another draw-bar, couples the cars together. This hook is provided with a curved end, h, in which is formed a slot, s, of similar curvature, and of a size sufficient to allow the pin f free passage, the said end being forked, as shown at i, Fig. 1. The hook end of this part fits snugly in the groove b of the adjacent draw-bar, and on going ahead bears against the ribj on the front of the head, and in backing, against the rear wall of the groove. The slot s in the end of the hook allows the said hook to be adjusted to draw-bars of different heights, and when hanging in the position shown in Fig. 2 to be thrust back between the bunters, out of reach of injury.

l indicates an ordinary twisted link depending from the pin f in the crutch of the hook, and designed to couple a car provided with my improved draw-bar with one having the well-known pin-and-link coupling devices.

This improved draw-bar will be usually cast complete, and will be connected to the framework of the car in the customary way.

What I claim as new, and desire to secure

by Letters Patent, is—

1. A draw-bar having laterally-extended head a, a transverse groove, b, extending across said head, the bunters d on the front of said head, the bolt f extending through said bunters, the hook g suspended from said bolt, and provided with slot s, substantially as specified.

2. The hook g, having a forked slotted curved end, h, adapted for use substantially as speci-

fied.

In testimony that I claim the above I have hereunto subscribed my name in the presence of two witnesses.

JOHN JOSEPH CHRISTIE.

Witnesses:

NEWTON JASPER HODGES. CYRUS MCKNIGHT.