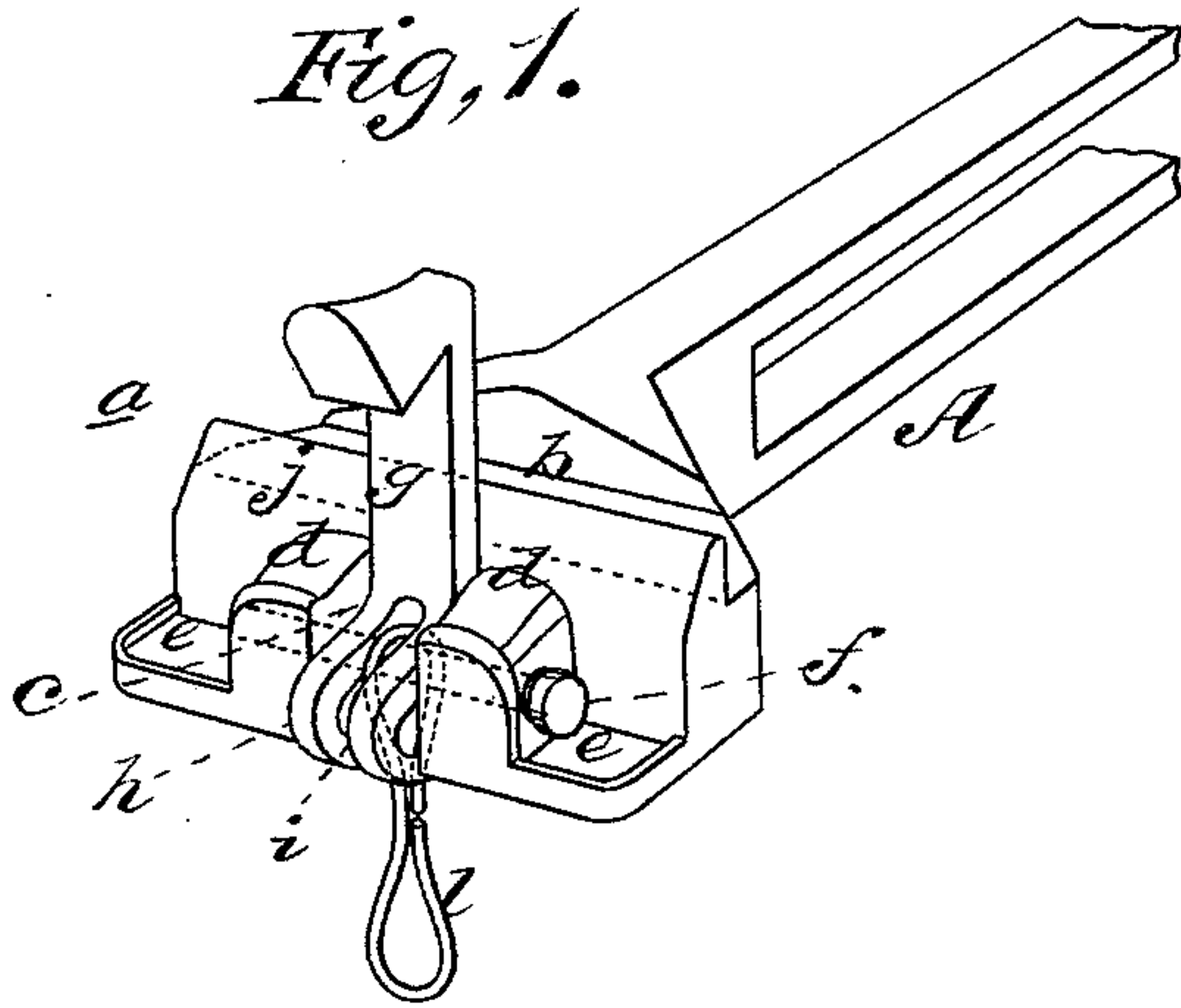


J. J. CHRISTIE.  
Car-Coupling.

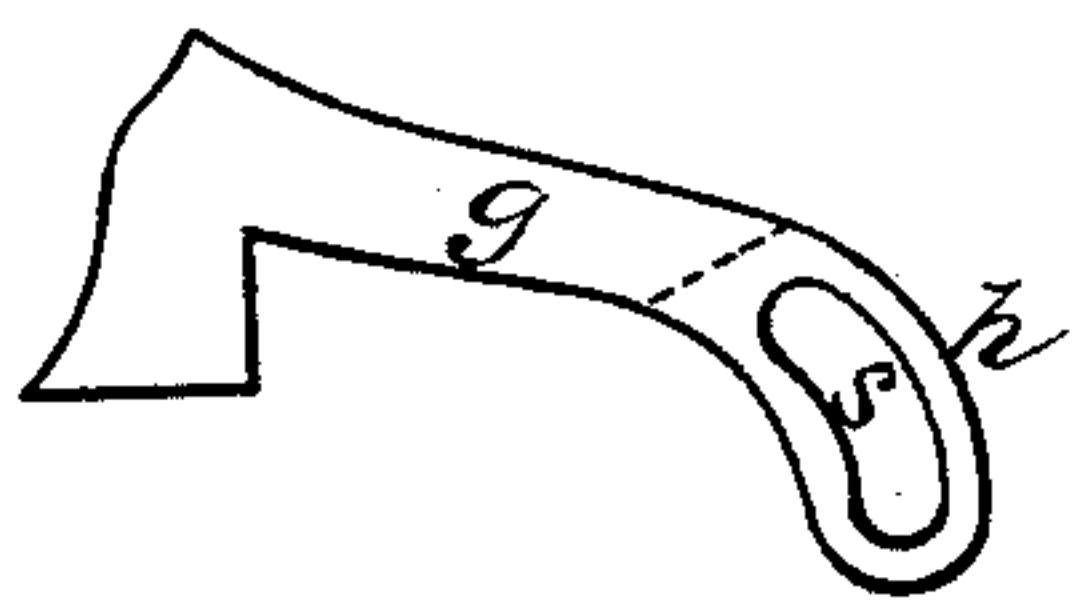
No. 214,364.

Patented April 15, 1879.

*Fig, 1.*



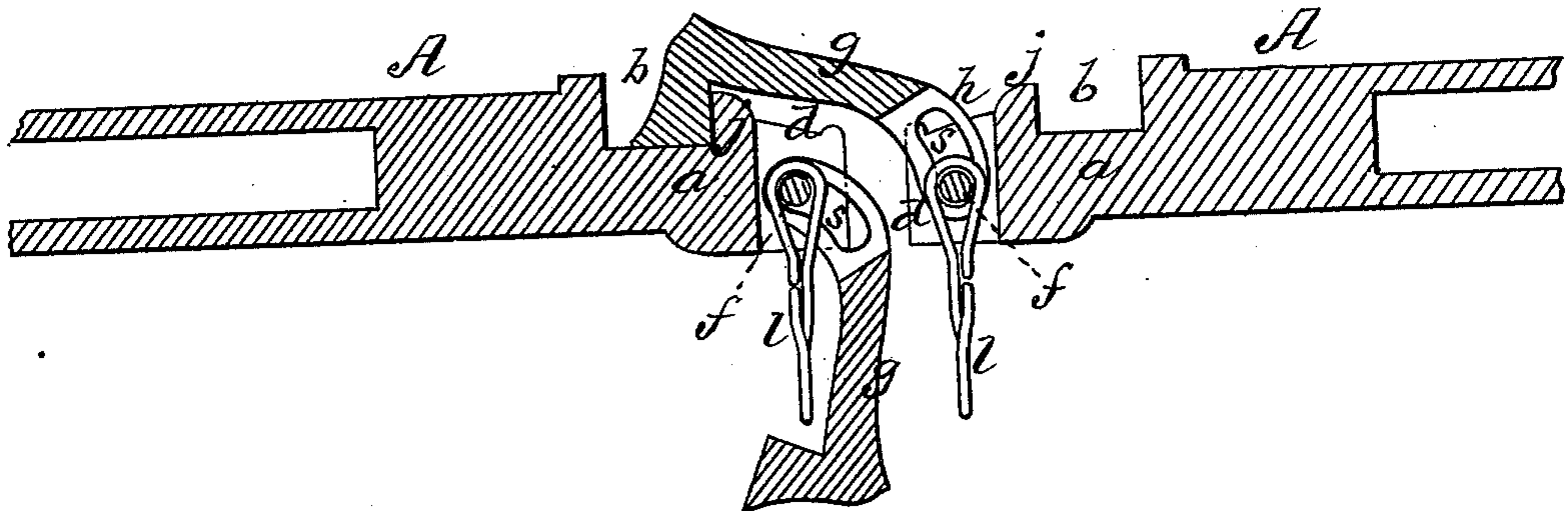
*Fig, 3.*



*Fig, 4.*



*Fig, 2.*



WITNESSES

*Villette Anderson.*  
*Frank J. Masi.*

INVENTOR

*John J. Christie*  
*By E. W. Anderson.*  
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-COUPPLINGS.

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 details.

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 laterally-extended 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 laterally-extended 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 rib *j* 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 specified.

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.