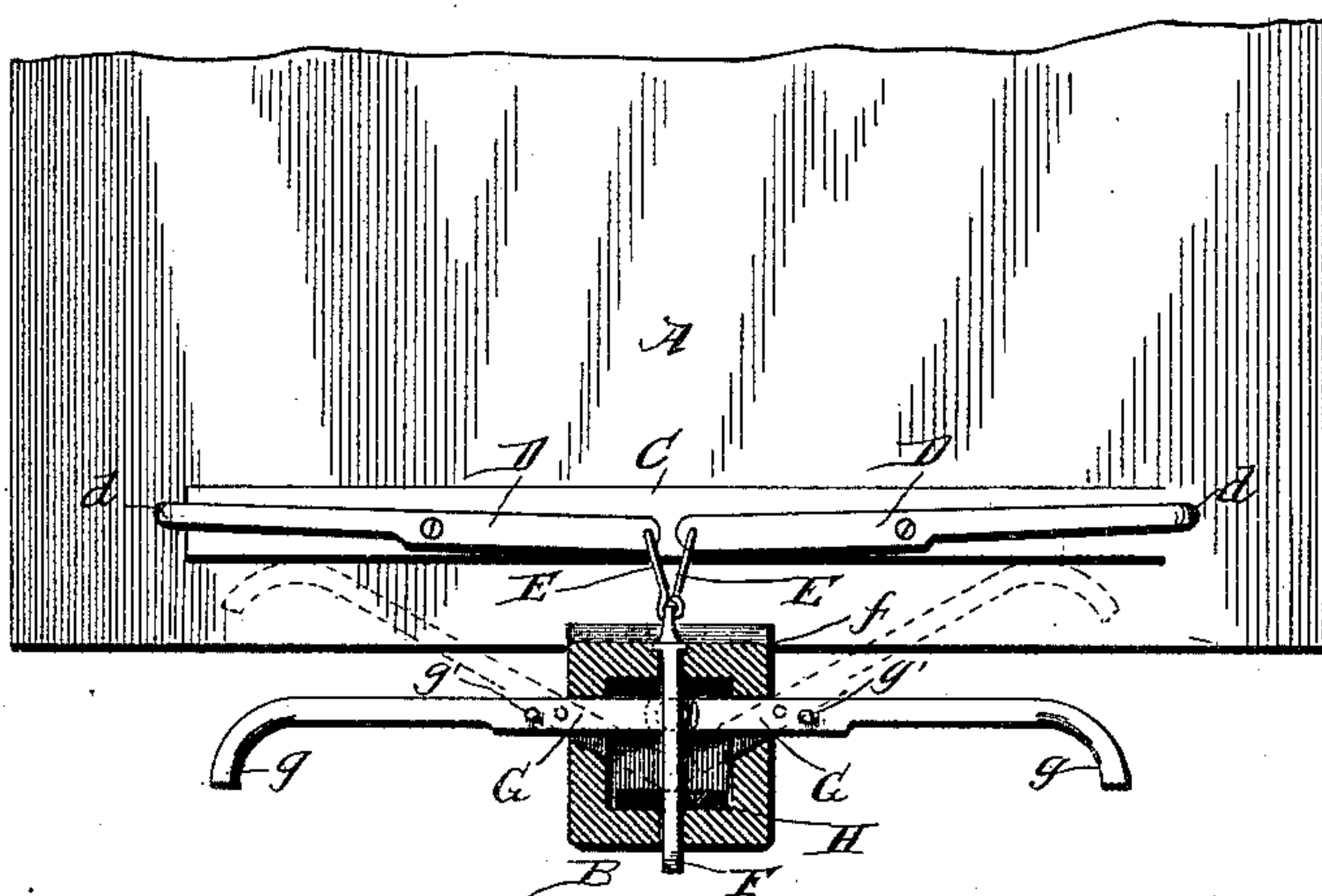
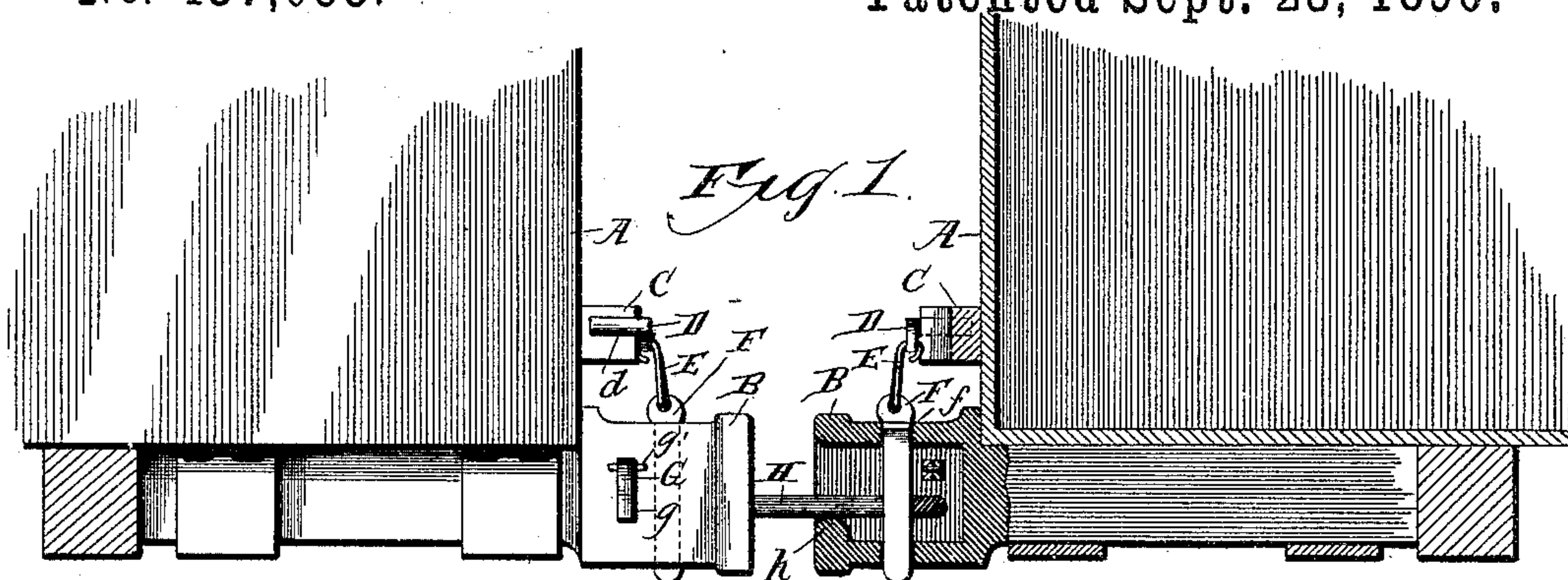


(No Model.)

H. SOMMERFELD.  
CAR COUPLING.

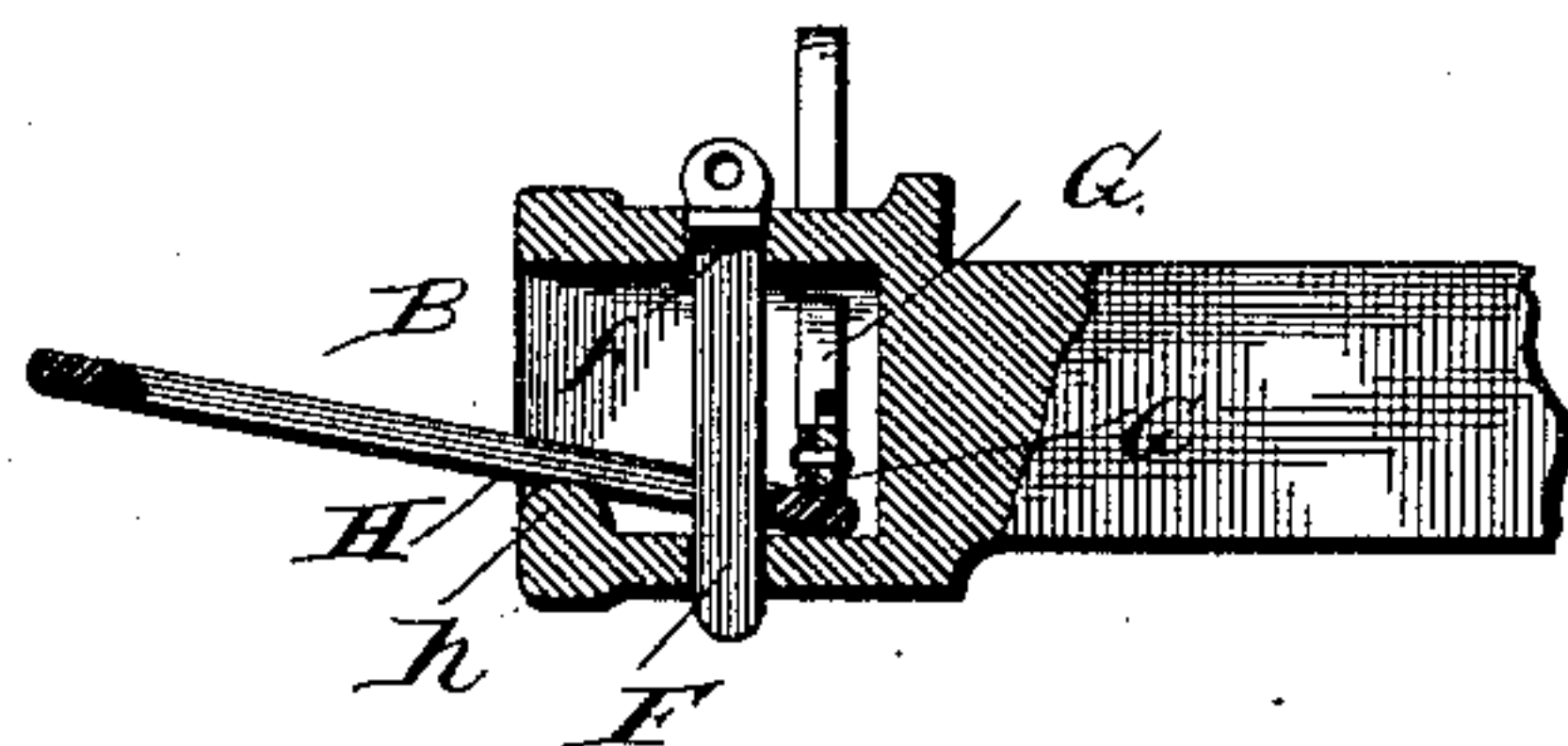
No. 437,055.

Patented Sept. 23, 1890.



*Fig. 2.*

*Fig. 3.*



Witnesses

*Geo. P. H. S.*  
*J. H. S.*

Inventor

*H. Sommerfeld,*

By his Attorneys

*Higdon & Higdon*



# UNITED STATES PATENT OFFICE.

HEINRICH SOMMERFELD, OF CANTON, ASSIGNOR OF ONE-EIGHTH TO EMIL ARNER, OF EMPORIA, KANSAS.

## CAR-COUPLING.

SPECIFICATION forming part of Letters Patent No. 437,055, dated September 23, 1890.

Application filed May 17, 1890. Serial No. 352,244. (No model.)

*To all whom it may concern:*

Be it known that I, HEINRICH SOMMERFELD, of Canton, McPherson county, Kansas, have invented certain new and useful Improvements in Car-Couplers, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, forming a part hereof.

My invention relates to improvements in car-couplings; and it consists in the peculiar construction and combination of devices, which will be more fully set forth and described hereinafter, and particularly pointed out in the claims, in which—

Figure 1 is a perspective sectional view of my invention. Fig. 2 is an end view of the same. Fig. 3 is a sectional view of one of the draw-heads.

This invention is constructed with its different parts so arranged that the cars may be safely coupled and uncoupled without the operator having to pass between the cars.

Referring to the drawings by letter, A A represent the ends of two cars.

B B represent the draw-head attached to the cars, with one of the draw-heads shown in the section, with coupling-link and coupling-pin in position, with the opposite end of the coupling-link thrust into the mouth of the draw-head, showing the perspective.

C C represent brackets or buffers attached horizontally to the end of the cars directly over the draw-head. To this buffer is attached two levers D D, extending outward to each side of the car. These levers are attached to the head of the draw-pin by a link, so that when the operator stands on either side of the car by means of the levers D D the coupling-pin can be withdrawn at will without passing between the cars.

Horizontally through the opening of the draw-head rearwardly I have provided orifices. Through these orifices are inserted the ends of two levers from each side of the draw-head, with their inner ends fastened together with the hinge link or loop. At each side of the draw-head, through the levers, is a lug-pin which prevents the lever from sliding either way out of place, at the same time admitting

of their being thrown up or down. The inner ends of these levers rest on the end of the coupling-link in the mouth of the draw-head, just at the rear of the coupling-pin. The object of the levers is to guide the opposite end of the coupling-link in the operation of coupling the cars.

d d are right-angle turns at the outer end of the levers D D, serving as a hand-hold for the operator.

E E represent two links connecting the coupling-pin to levers D D.

F is the coupling-pin.

G G represent levers controlling coupling-link.

g' g' is a lug passing through levers g g at either side of the draw-head.

f is a shoulder on the coupling-pin.

H is a coupling-link.

h is a semicircle in cross-section horizontally across the opening of the draw-head, serving as a pivotal balance, on which coupling-link rests.

This improvement in car-coupling can be easily applied to all of the open draw-heads now in use with very little extra expense.

Having thus fully described my invention, what I claim as new, and desire protection in by Letters Patent, is—

1. In a car-coupling, the combination of the draw-head B B, with orifices G G extending horizontally with the walls of the draw-head, with levers g g, as fully set forth and described.

2. In a car-coupling, the combination of the draw-head with the semicircular mouth-piece H, extending horizontally across the lower portion of the mouth of the draw-head, with links E E connecting levers D D to coupling-pin F, as fully set forth and described.

3. In a car-coupling, the combination of levers D D and buffer C, as fully set forth and described.

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

HEINRICH SOMMERFELD.

Witnesses:

H. E. PRICE,  
J. E. HIGDON.