

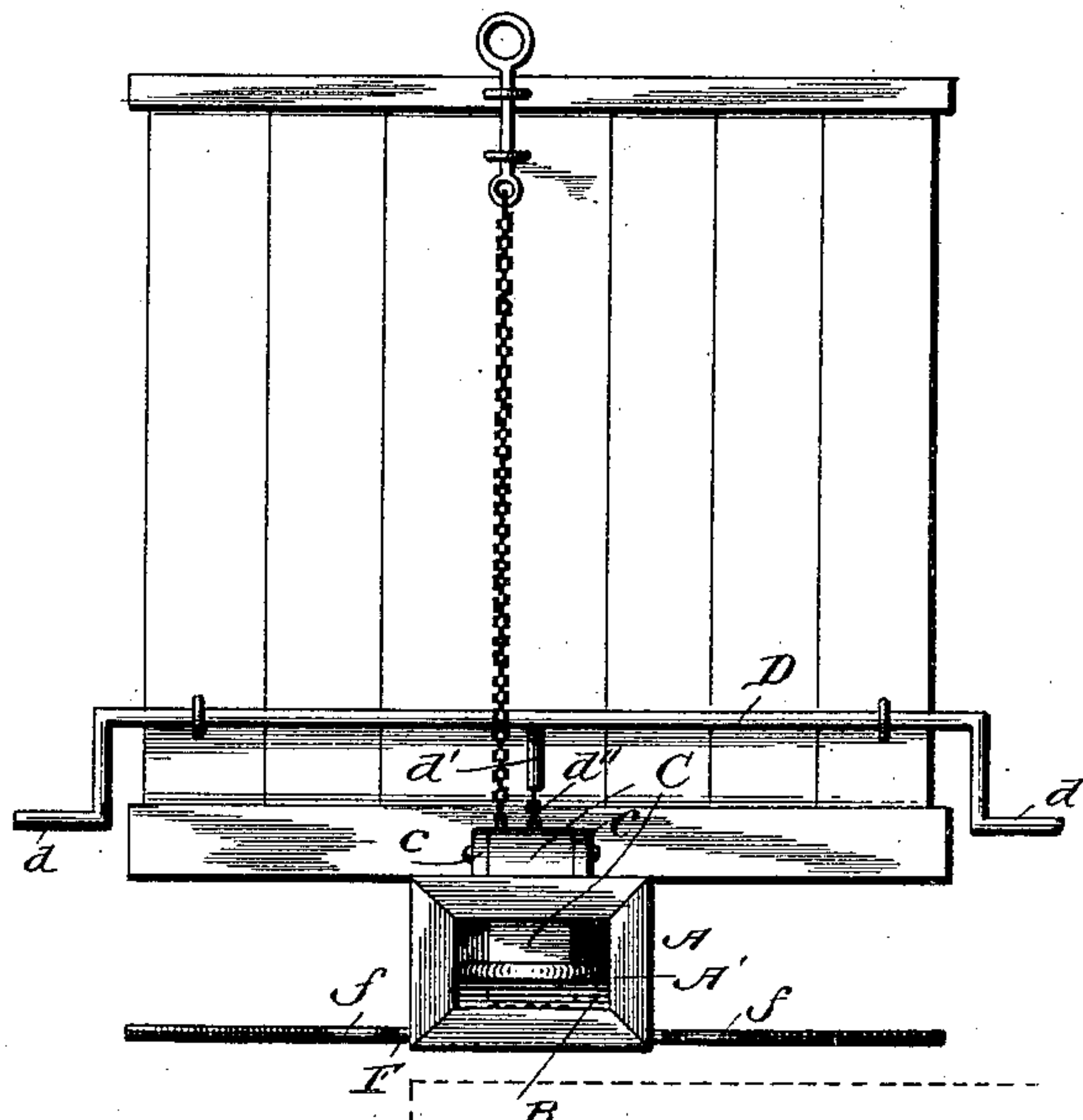
(No Model.)

W. B. GASSER.  
CAR COUPLING.

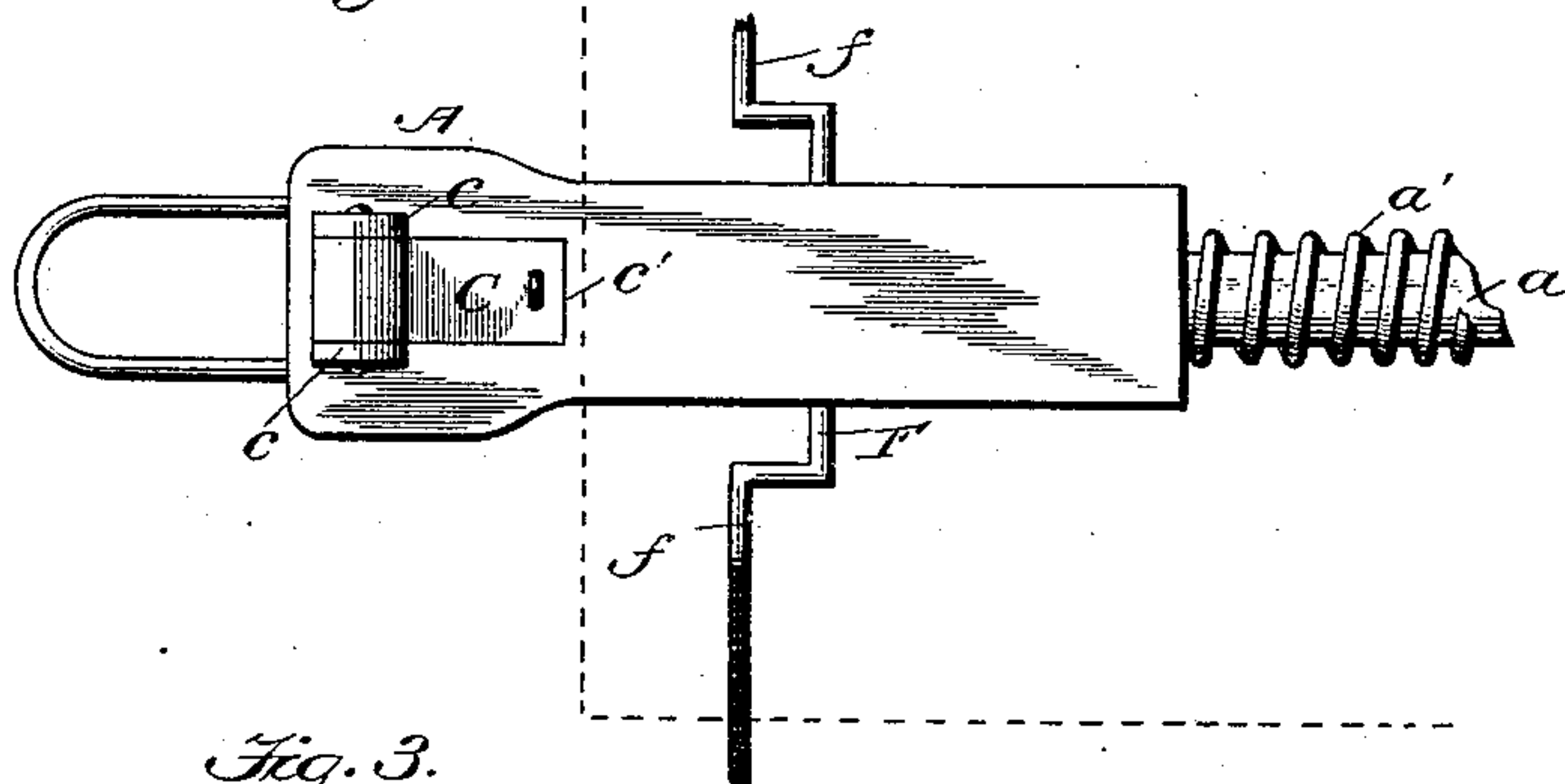
No. 479,497.

Patented July 26, 1892.

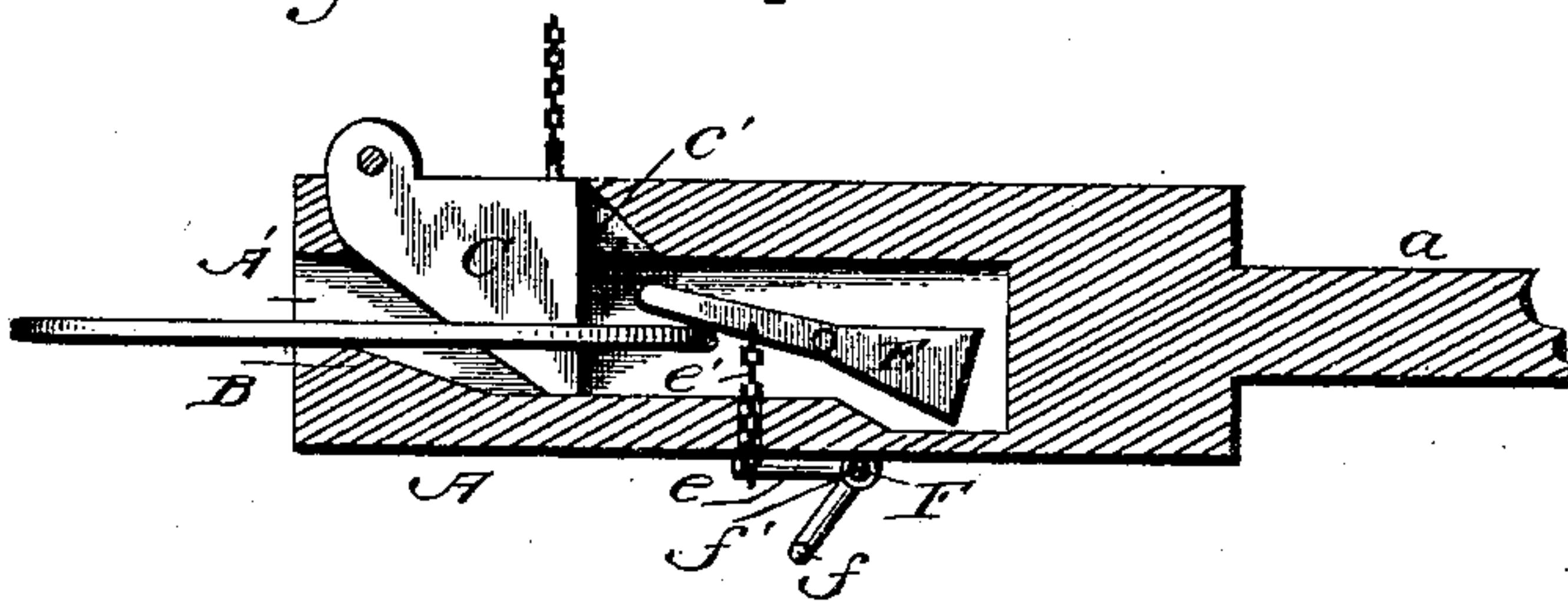
*Fig. 1.*



*Fig. 2.*



*Fig. 3.*



Witnesses:  
*Wm. O. Bely.*

Inventor:  
*Wm. B. Gasser.*  
By *Edw. Bros.*  
Attys.

# UNITED STATES PATENT OFFICE.

WILLIAM B. GASSER, OF CHICAGO, ILLINOIS.

## CAR-COUPLING.

SPECIFICATION forming part of Letters Patent No. 479,497, dated July 26, 1892.

Application filed January 20, 1892. Serial No. 418,683. (No model.)

*To all whom it may concern:*

Be it known that I, WILLIAM B. GASSER, a citizen of the United States, residing at Chicago, in the county of Cook and State of Illinois, 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.

My invention relates to improvements in car-couplings, particularly to that class employing a hook and link; and its object is to provide a simple and effective arrangement and construction of parts whereby cars may be automatically coupled and uncoupled without necessitating the operator going between them.

With these and other ends in view the invention comprises a draw-head having the ordinary bumper and opening, a hook pivotally secured in the front portion of the draw-head and extending down into the opening therein, means for raising the hook, and lever mechanism adapted to raise and lower the link, all combined and arranged as will be more fully described hereinafter.

To enable others to more readily understand my invention, I have illustrated the same in the accompanying drawings, in which—

Figure 1 is a front view of a car having my invention applied thereto. Fig. 2 is a top plan view of the draw-head, showing a portion of the car in dotted lines. Fig. 3 is a longitudinal sectional view.

Referring to the drawings, A designates the draw-head, and it is provided with a longitudinal opening A' to receive the link, as is customary. The draw-bar a and spring a' are also arranged in substantially the same manner as in couplers of improved construction now in use.

In the front portion of the draw-head is an enlargement B, which preferably converges to a sharp edge and constitutes a fulcrum for the link for a purpose hereinafter described.

The hook C is pivotally secured in lugs c, forming bearings on the top of the draw-head at or near the front thereof, and it operates in a slot c', the extreme end being arranged to pass through the link, which has been previously placed in the draw-head opening, and

remains in a stationary position in rear of the fulcrum B. When the cars are coupled, the strain of the link on the hook holds the latter rigidly in its proper position and draws said hook back against its pivot. The front of the draw-head may be extended upward in rear of the pivot of said hook to relieve the pivot of some of the strain exerted by the link, and the fulcrum B holds the link sufficiently elevated to prevent it from slipping over the end of the hook. To operate this hook without going between the cars, I provide a rock-shaft D, which is secured on the end of the car and is provided with a crank-handle d. This shaft has a forward extension d', which is connected by a chain d'' or other desirable means with the free end of the hook. When it is desired to uncouple the cars, the crank d is turned, which raises the extension d' and the hook and permits the link to slip out of the draw-head. The crank is then released and the hook drops back into position for coupling.

In coupling cars it is obvious that the elevation of the link must necessarily be varied to adapt it to draw-heads of different heights, and I employ the following novel means for this purpose.

A weighted lever E is pivotally secured in the draw-head in rear of the link and it is so arranged that its forward end will operate behind the hook to raise or lower the rear end of the link, thus depressing or elevating the front end, as occasion requires. A rock-shaft F, having handles f, is secured in brackets f' on the bottom of the draw-head, and a short bar e, secured to said shaft at or about its center, is connected with the lever by a chain e'. Thus when it is desired to raise or lower the disengaged end of the link the handles f on the side of the car are turned and the lever E will cause the link to assume the desired position, being fulcrumed at B. The hook C and lever E may be operated by chains running up to the top of the car, if desired.

I am aware that changes in the form and proportion of parts and details of construction of my invention can be made without departing from the spirit or sacrificing the advantages thereof, and I therefore reserve the right to make such changes as fairly fall within the scope of the same.

Having thus fully described my invention,



what I claim as new, and desire to secure by Letters Patent, is—

1. In a car-coupling, the combination, with a draw-head having a fulcrum B therein, of  
5 a link, a hook pivoted in said draw-head and operating in a slot therein to engage with a link inserted in said draw-head, said link being adapted to force the hook against the front of said draw-head, a weighted lever piv-  
10 oted within the draw-head in rear of the hook and having its free end extending forwardly to engage with the link to raise or lower the same, and means for operating said lever, substantially as described.

15 2. In a car-coupling, the combination, with a draw-head having an enlargement B, which converges to a sharp edge to form a fulcrum, a hook pivoted in lugs on the top of the draw-head and arranged to bear against the front

thereof, said hook operating in a slot in the  
draw-head to engage with the link inserted  
therein and adapted to be drawn by said link  
against its pivot and the front of the draw-  
head, a rock-shaft D, having an extension  $d'$ ,  
a chain connecting the extension and the  
hook, whereby the latter may be released from  
engagement with the link, a rock-shaft F, se-  
cured on the draw-head and having a short  
bar  $e$ , projecting outward therefrom, and a  
chain connecting said bar and the free end  
30 of the weighted lever to operate the same, substantially as described.

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

WILLIAM B. GASSER.

Witnesses:

WM. WARTMAN,  
LOUIS J. HAMMEL.