

(No Model.)

R. L. BOYERS.

CAR COUPLING.

No. 344,715.

Patented June 29, 1886.

Fig. 1.

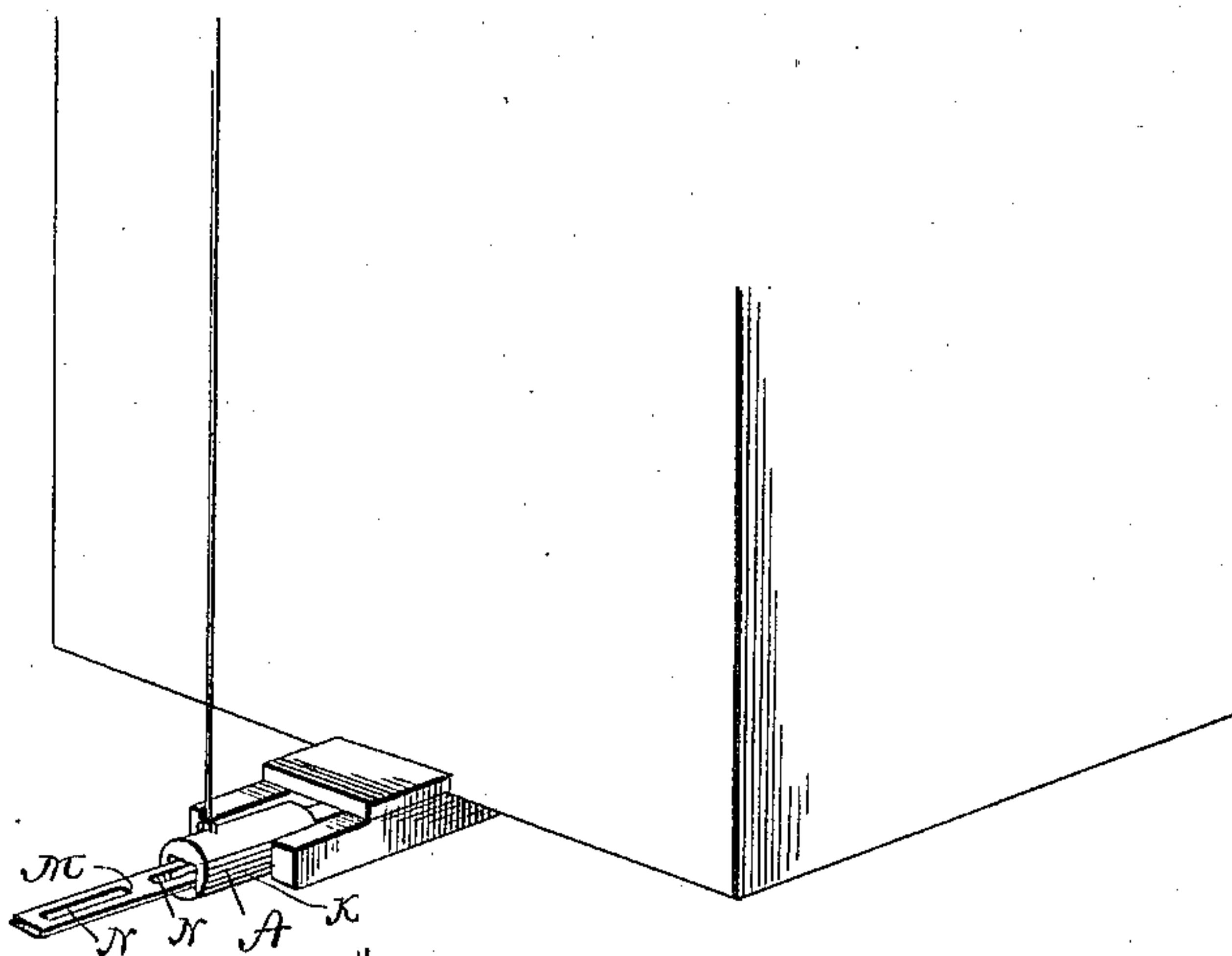


Fig. 2.

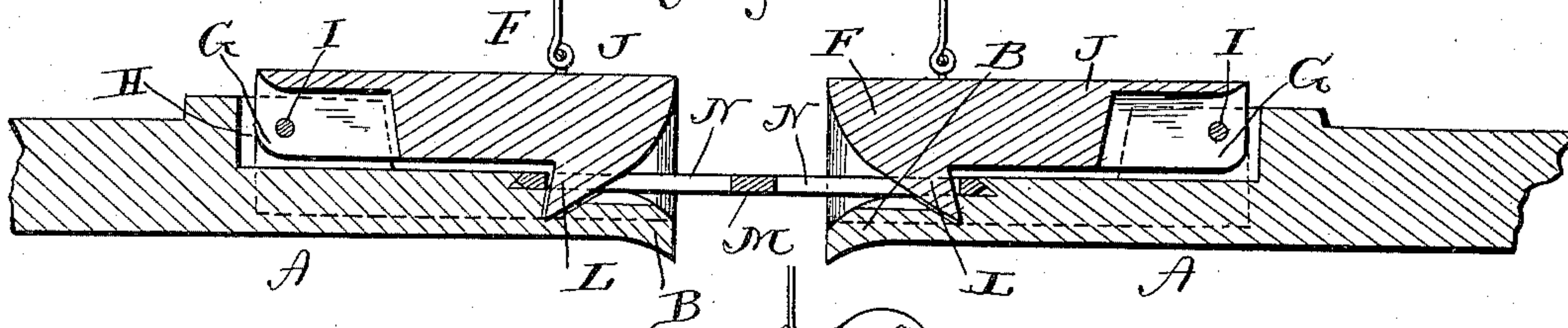


Fig. 3.

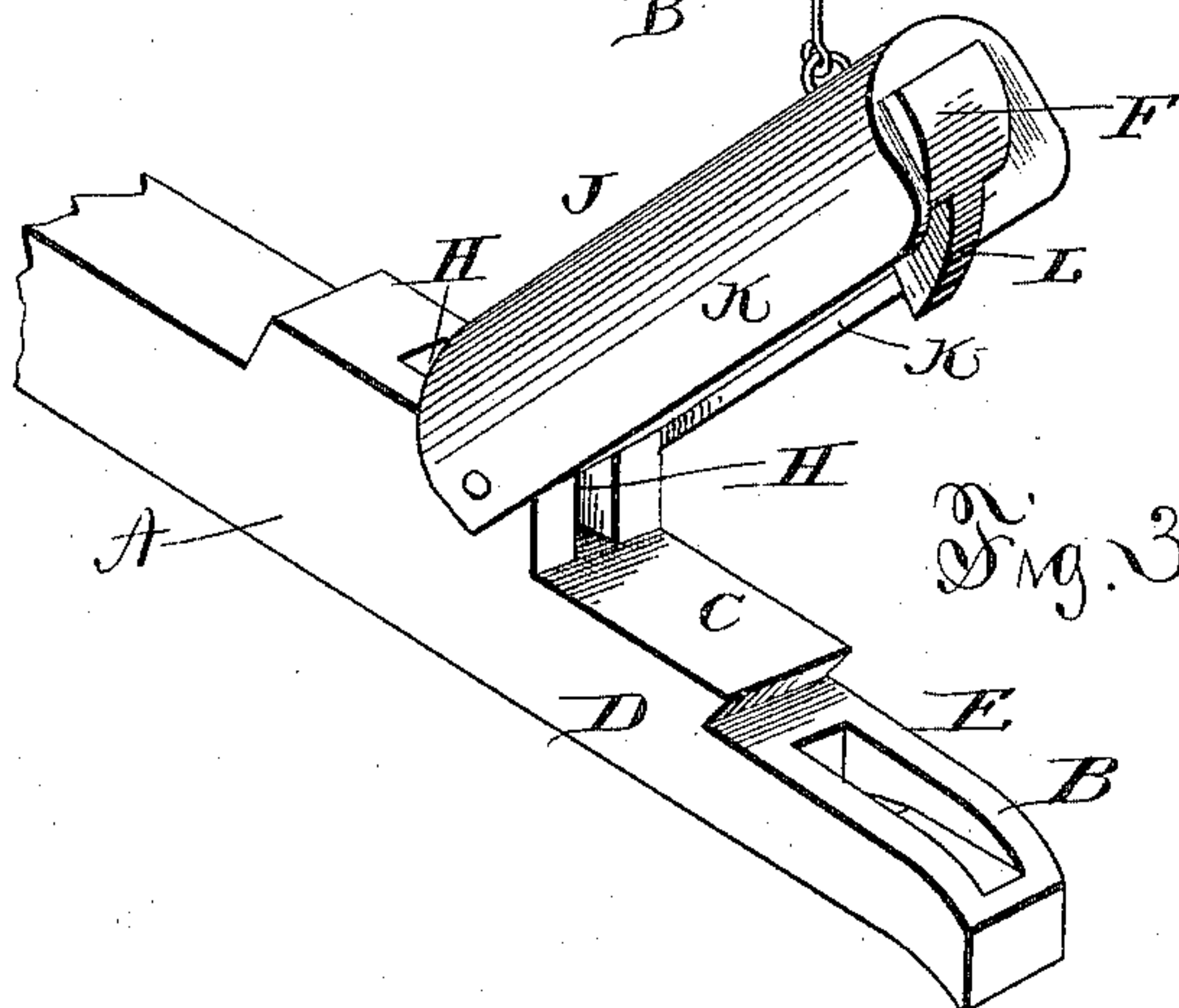
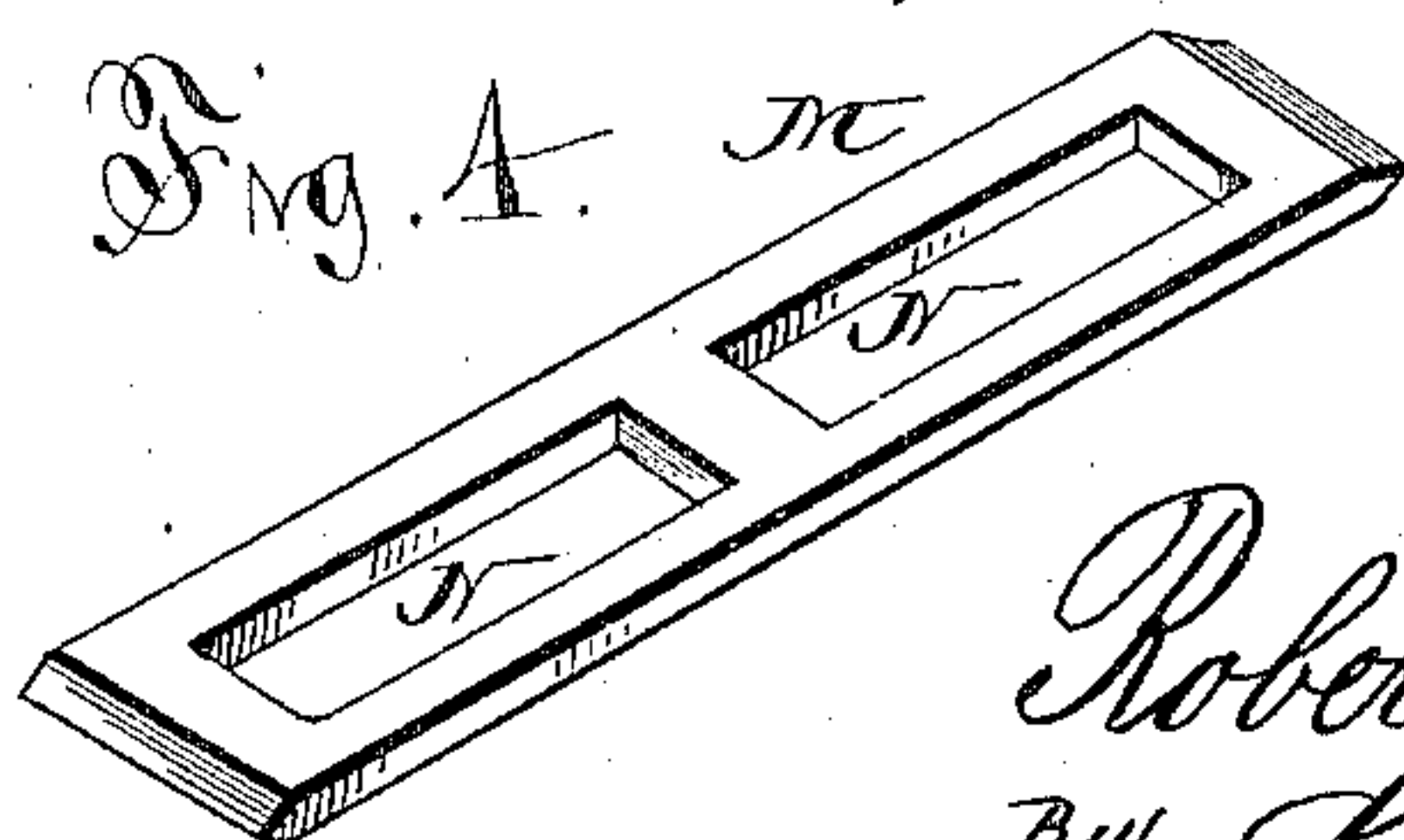


Fig. 4.



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# UNITED STATES PATENT OFFICE.

ROBERT L. BOYERS, OF SUNSET, TEXAS.

## CAR-COUPLING.

SPECIFICATION forming part of Letters Patent No. 344,715, dated June 29, 1886.

Application filed April 26, 1886. Serial No. 200,160. (No model.)

*To all whom it may concern:*

Be it known that I, ROBERT L. BOYERS, a citizen of the United States, and a resident of Sunset, in the county of Wise and State of Texas, have invented certain new and useful Improvements in Car-Couplings; and I do hereby declare that the following is a full, clear, and exact description of the invention, which will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, which form a part of this specification, and in which—

Figure 1 is a perspective view of the ends of two railways-cars provided with my improved car-coupling. Fig. 2 is a longitudinal vertical sectional view of the same. Fig. 3 is a perspective view of one draw-head, showing it opened; and Fig. 4 is a similar view of the coupling-link.

Similar letters of reference indicate corresponding parts in all the figures.

My invention has relation to that class of car-couplings in which the open ends of a coupling bar or link are engaged by hooks in the draw-heads; and it consists in the improved construction and combination of parts of such a coupling, in which the hooks are projecting from the under sides of arms pivoted upon the draw-heads and dropping down by their gravity, and in which the said hooks project into registering-recesses in the upper side of the draw-head, as hereinafter more fully described and claimed.

In the accompanying drawings, the letter A indicates the draw-head, which is attached to the car in any desired manner, and the upper side of this draw-head is cut away so as to form a shoulder, C, near the inner end of the draw-head, and the forward end, B, of which cut-away portion of the draw-head is curved slightly downward and beveled. The upper side of the reduced portion has an outwardly-facing slightly-beveled shoulder, D, and the portion forward of the shoulder is formed with a longitudinal recess, E. An arm, F, is pivoted with its inner reduced end, G, in a recess, H, in the shoulder of the draw-head, at the rear end of the same, upon a bolt, I, passing transversely through the shoulder and recess,

and through a perforation in the reduced end of the arm, and the sides and top of this arm are provided with a cap, J, integral with the arm, and having its flanges K K projecting down over the sides of the draw-head, the arm resting upon the reduced portion of the draw-head. The outer end of the arm is provided upon the under side with a downwardly-projecting hook, L, the forward side of which is beveled, and this hook projects into and fits in the recess in the reduced portion of the draw-head.

The coupling link or bar M has two slots or apertures, N N, at its ends, although it may be an entirely open link, and the hooks may engage these apertures, while the straight ends of the bar will bear against the small shoulders of the draw-head, which are of the same height as the thickness of the bar or link, so that the said bar or link will just fit between the draw-head and the arm with the hook. It will be seen that the gravity of the arm will keep it down engaging the aperture of the link, and the arm may be raised by means of rods O, attached at the lower ends to the arms, and having suitable handles or other means for drawing them, so that an arm may be raised sufficiently to allow the link to slip out and the cars to become uncoupled. The link in coupling will strike the beveled side of the hook and will raise the gravitating arm, allowing it to slip under the arm and to have the hook engaging the aperture, when the gravity of the arm will cause the arm to drop with the hook entering the recess and passing through the aperture in the link.

Having thus described my invention, I claim and desire to secure by Letters Patent of the United States—

1. In a car-coupling, the combination of a draw-head, the outer end of which is reduced and provided with an outwardly-facing beveled shoulder, an arm pivoted to the rear end of said draw-head having a hook at its front end, and a link of the same thickness as the shoulder, and having its ends beveled to engage with said shoulder.

2. In a car-coupling, the combination of a draw-head having a longitudinal recess near the forward end in its upper side, an arm piv-

oted at its inner end upon the draw-head and  
having downwardly-projecting flanges upon  
its sides, and a downwardly-projecting hook  
near the outer end fitting in the recess of the  
5 draw-head, and a flat coupling link or bar  
having apertures at its ends for the hook, as  
and for the purpose shown and set forth.

In testimony that I claim the foregoing as  
my own I have hereunto affixed my signature  
in presence of two witnesses.

ROBERT L. BOYERS.

Witnesses:

R. G. HATCHETT,  
R. C. JOHNSON.