

(No Model.)

C. M. CLANCY.

CAR COUPLING.

No. 302,892.

Patented Aug. 5, 1884.

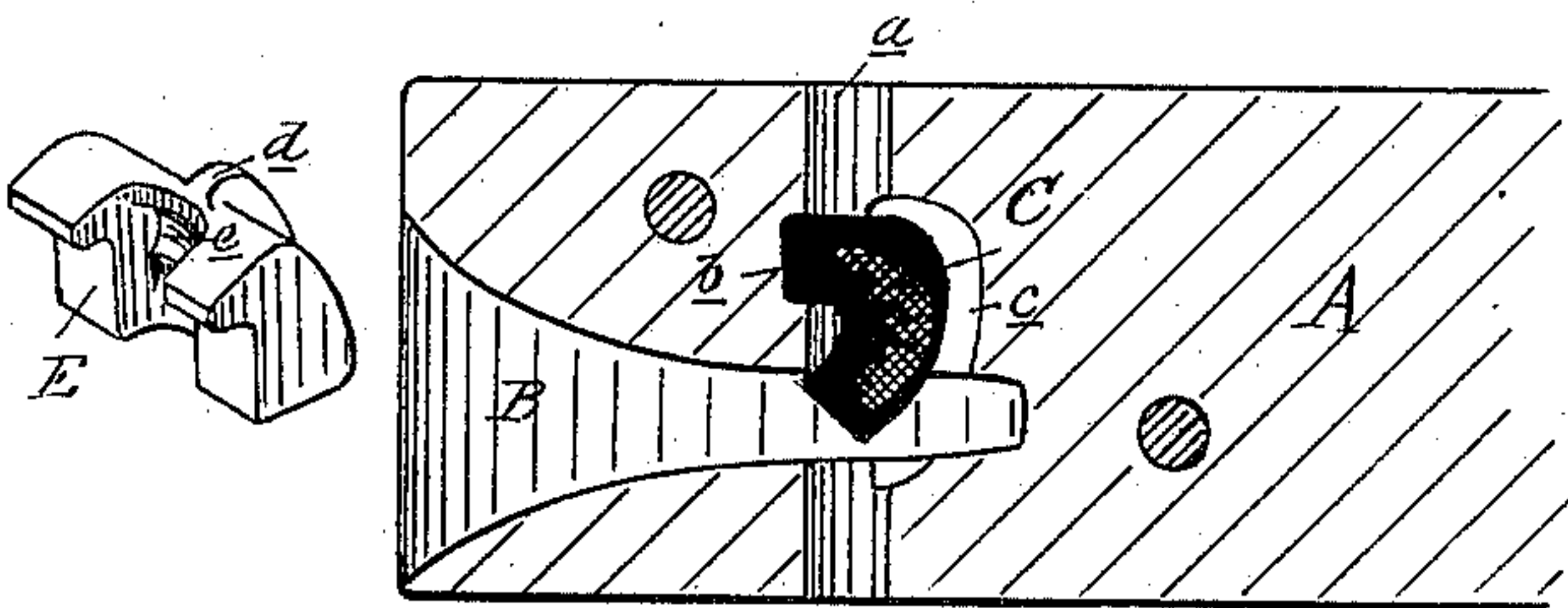


Fig. 1

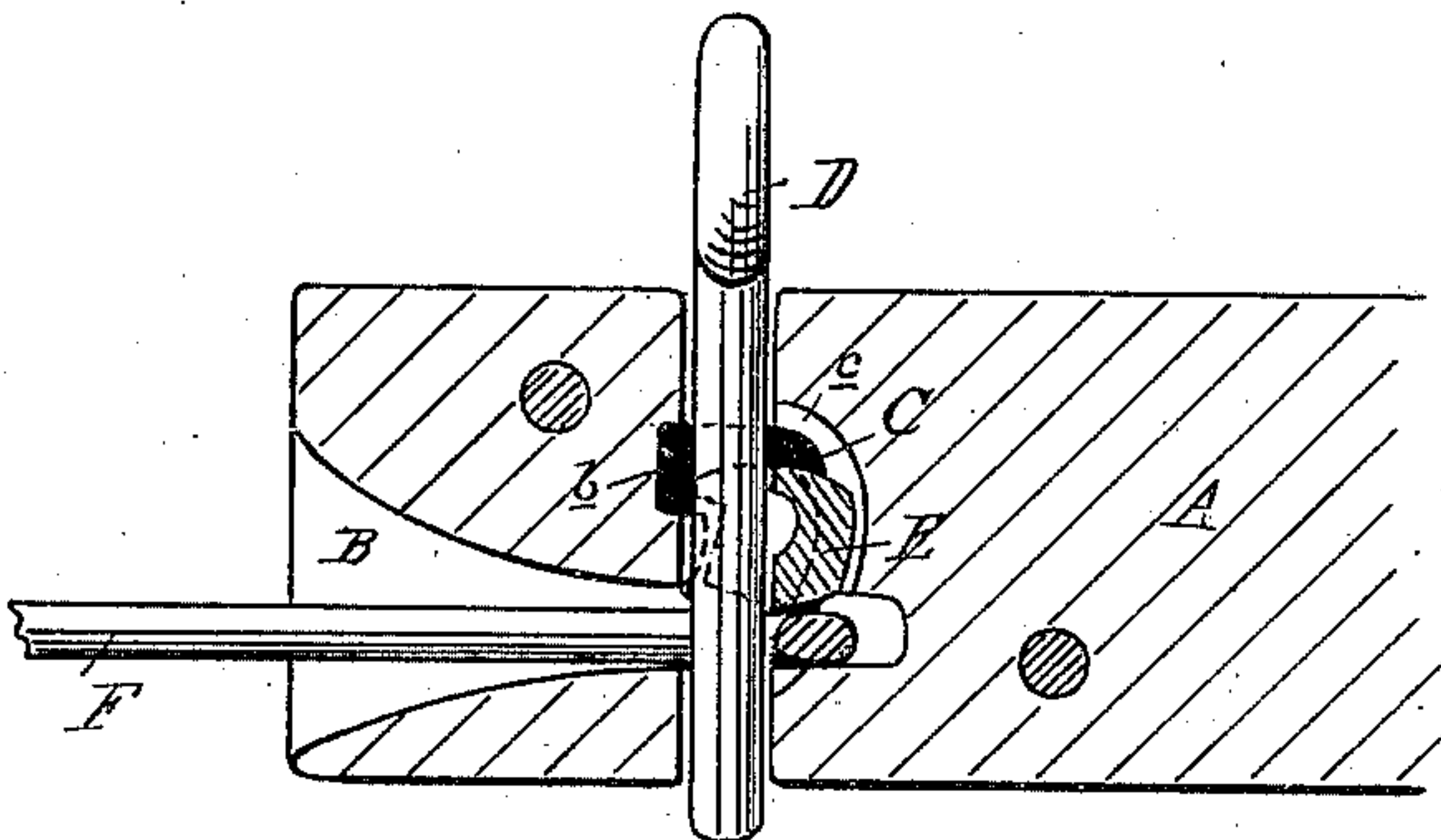


Fig. 2

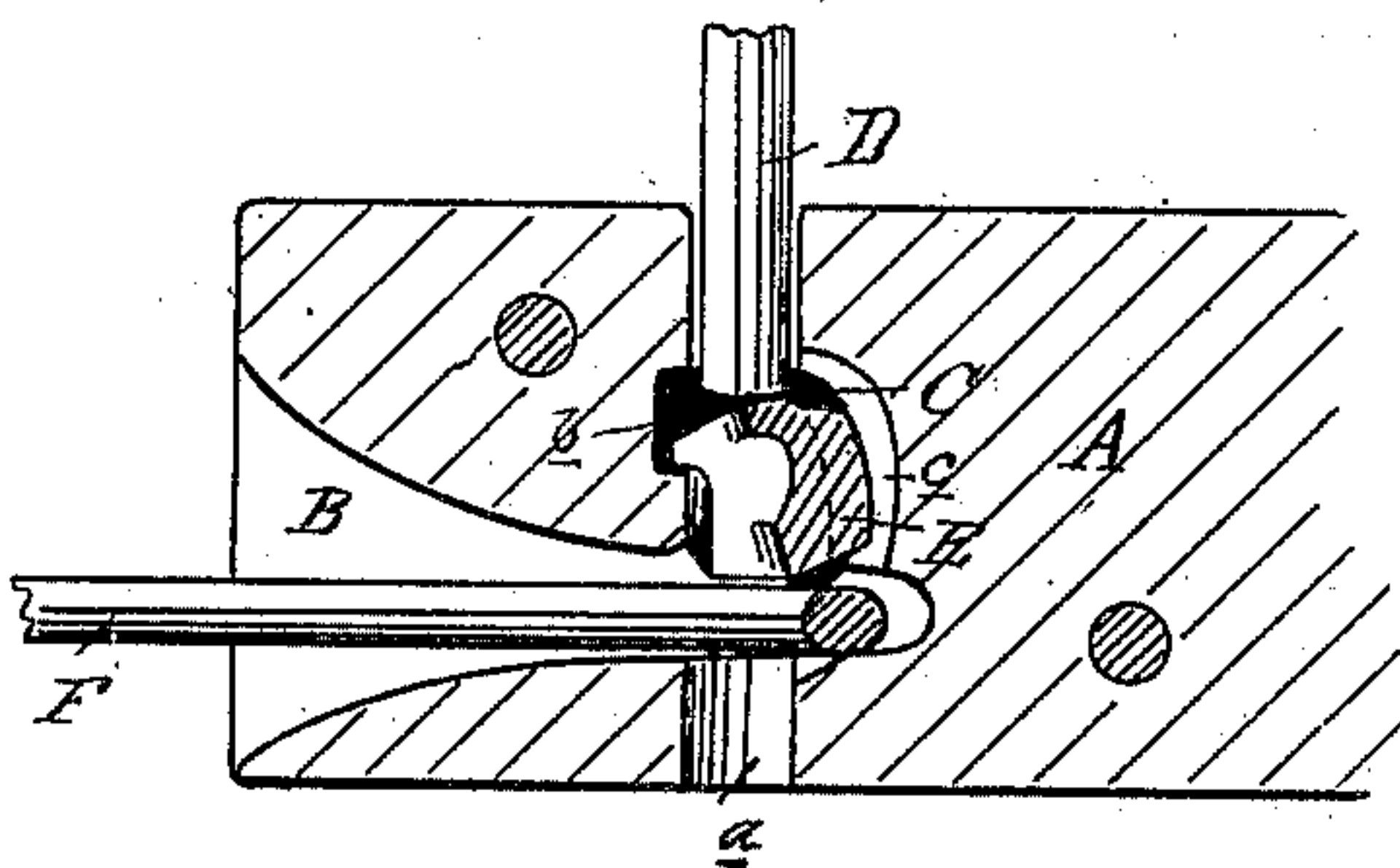


Fig. 3

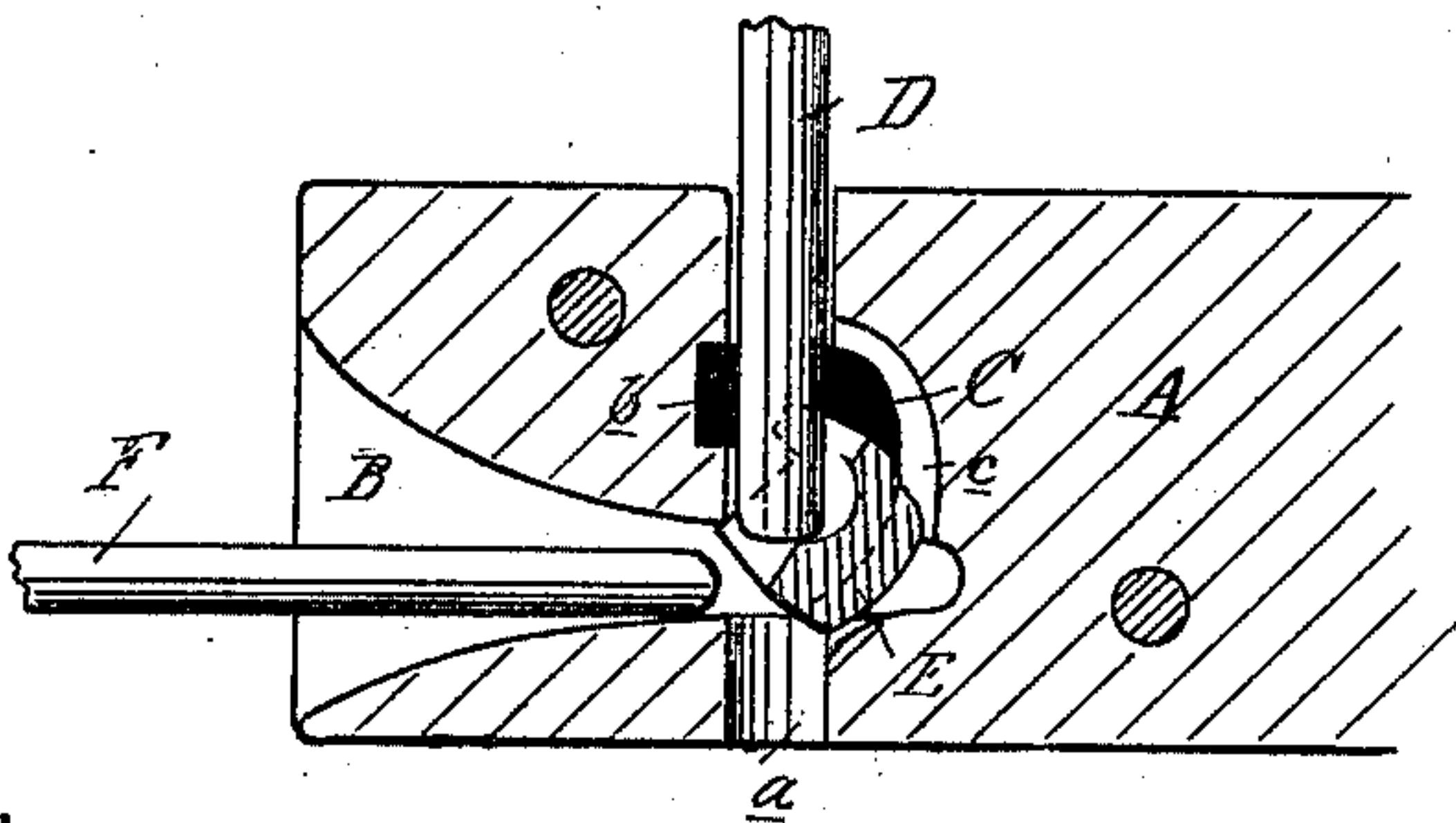


Fig. 4

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CROWELL M. CLANCY, OF WALLACEBURG, ONTARIO, CANADA.

CAR-COUPLING.

SPECIFICATION forming part of Letters Patent No. 302,892, dated August 5, 1884.

Application filed December 19, 1883. (No model.)

To all whom it may concern:

Be it known that I, CROWELL M. CLANCY, of Wallaceburg, in the county of Kent and Province of Ontario, Dominion of Canada, have invented new and useful Improvements in Car-Couplings; and I do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, which form a part of this specification.

This invention relates to certain new and useful improvements in the construction and operation of car-couplings of that class where in the ordinary link and pin are employed.

The invention consists in the peculiar construction, combination, and operation of the parts, by means of which the pin is supported during the withdrawal of the link in the initiatory part of such movement, and the completion of such withdrawal changes the position of the pin ready to engage with the entering-link in the operation of recoupling, as more fully hereinafter described.

Figure 1 is a vertical central longitudinal section through the center of the draw-head, with all the other parts removed. Fig. 2 is a like section with the parts all in place, as when the coupling is completed. Fig. 3 is a like section showing the position of the parts, the shuttle supporting the pin preparatory to the removal of the link. Fig. 4 is a like view showing the change in the position of the pin and the manner in which the shuttle supports the same, and the link entering to engage with the pin by forcing the shuttle into the position shown in Fig. 2, whereby the pin is allowed to drop into its engagement.

In the accompanying drawings, which form a part of this specification, A represents a draw-head, with bell-mouth B leading into a chamber, C, and provided with a vertical hole through the center of the device, to allow the pin D to pass. The upper part of this chamber C is in line with the upper wall of the bell-mouth B, and the chamber is provided with a recess, *b*, and a guideway, *c*, is formed in the rear wall of said chamber.

E is a shuttle, a perspective view of which is shown detached from the other parts, and upon its rear face is a guide-flange, *d*,

which slides in the guideway. The upper portion of this shuttle or stop is made heavier than the lower portion thereof, and in the front face there is formed a semicircular recess, which, when the pin is inserted through the draw-head, is coincident with the pin-hole therein, the lower edge of said shuttle resting upon the link F. In the withdrawal of the pin, the upper portion of this shuttle, being heavier than the lower side thereof, falls forward into the recess *b*, thereby presenting an obstruction to the pin dropping back into its seat, and leaving the link in position to be withdrawn. As the link is withdrawn the shuttle drops a little upon a radial movement until the upper end of the recess therein is presented coincident with the upper pin-hole, and the lower portion partially covers the entrance to the bottom pin-hole, when the pin drops into such recess as the link is withdrawn and holds the shutter in this position, while at the same time the latter prevents the pin from dropping into the lower pin-hole. In this position the device is ready to receive the entering link, which, striking the lower side of the shuttle, forces it into an upright position, disclosing the lower pin-hole and allowing the pin to drop into its proper engagement.

It will be noticed that the principal part of my invention is in a shuttle adapted, in the movements of coupling and uncoupling, to have two movements, the first being that the upper and heavier portion falls forward, upon the pin being withdrawn, to form a rest for the end of the pin, and the other to recede from this position, and the lower edge radially drawn forward by the withdrawal of the link, and partially covering the lower pin-hole, allowing the pin to drop into the recess in the shuttle, and by such movement wedging the shuttle and pin in the chamber until the entering link, striking the lower edge of the shuttle, drives it from its last position radially to the rear, whereby its recess is presented in coincidence with both the upper and lower pin-holes, so that the pin may fall unobstructedly.

What I claim as my invention is—

1. In combination with a draw-head, a shuttle inclosed in a chamber therein, and pro-

vided with a recess in its front face, and having the two movements under the operation of the pin and link herein described, and for the purposes set forth.

- 5 2. A draw-head provided with the bell-mouth B and chamber C, in combination with a shuttle, E, provided with a recess, *e*, coin-

cident, when the pin and link are in place, with the pin-hole *a*, the parts constructed and operating substantially as specified.

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Witnesses:

H. S. SPRAGUE,

CHARLES J. HUNT.