

No. 702,186.

Patented June 10, 1902.

J. A. CHUBB.
CAR COUPLING.

(Application filed Jan. 14, 1902.)

(No Model.)

Fig. 1.

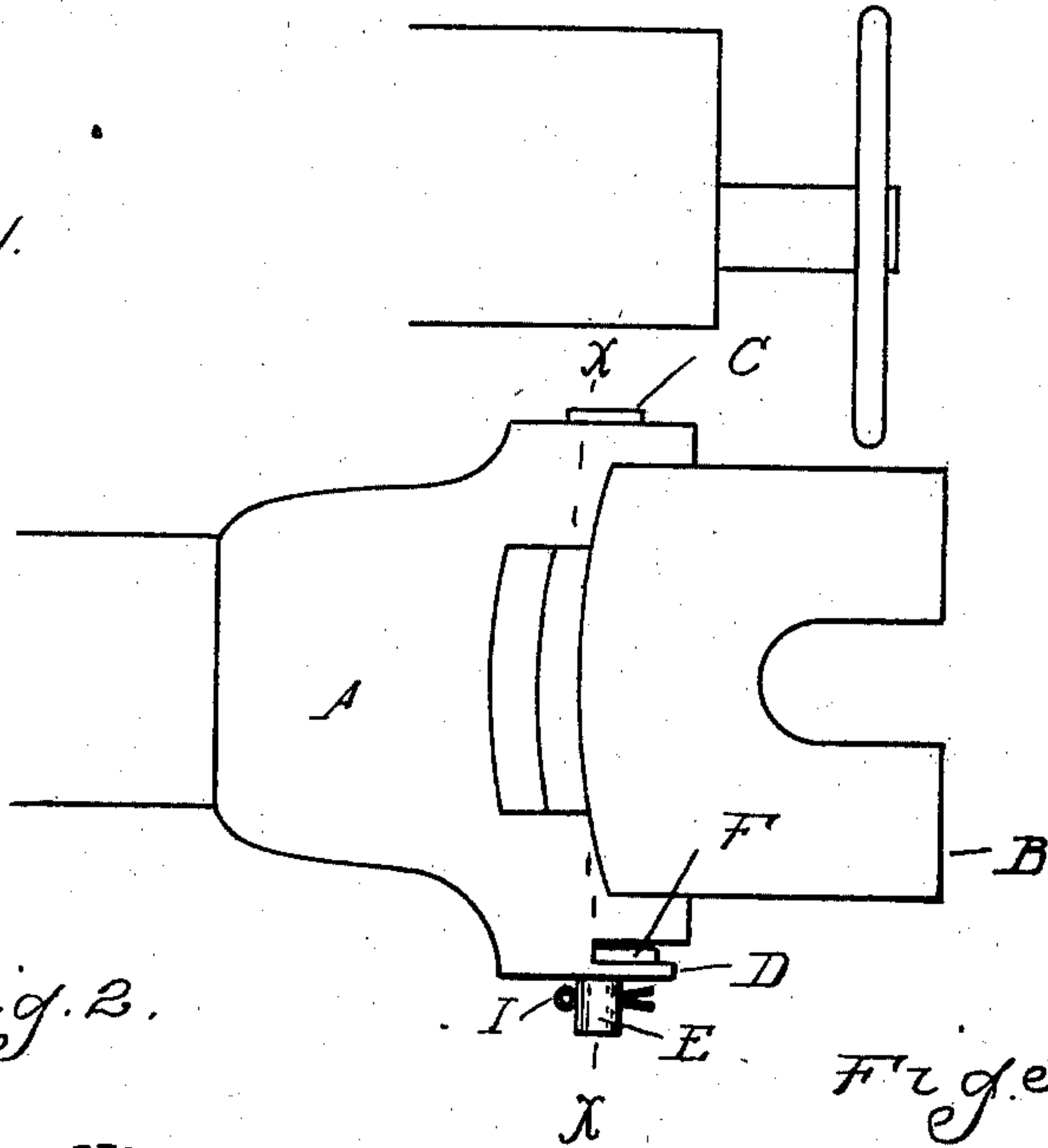


Fig. 2.

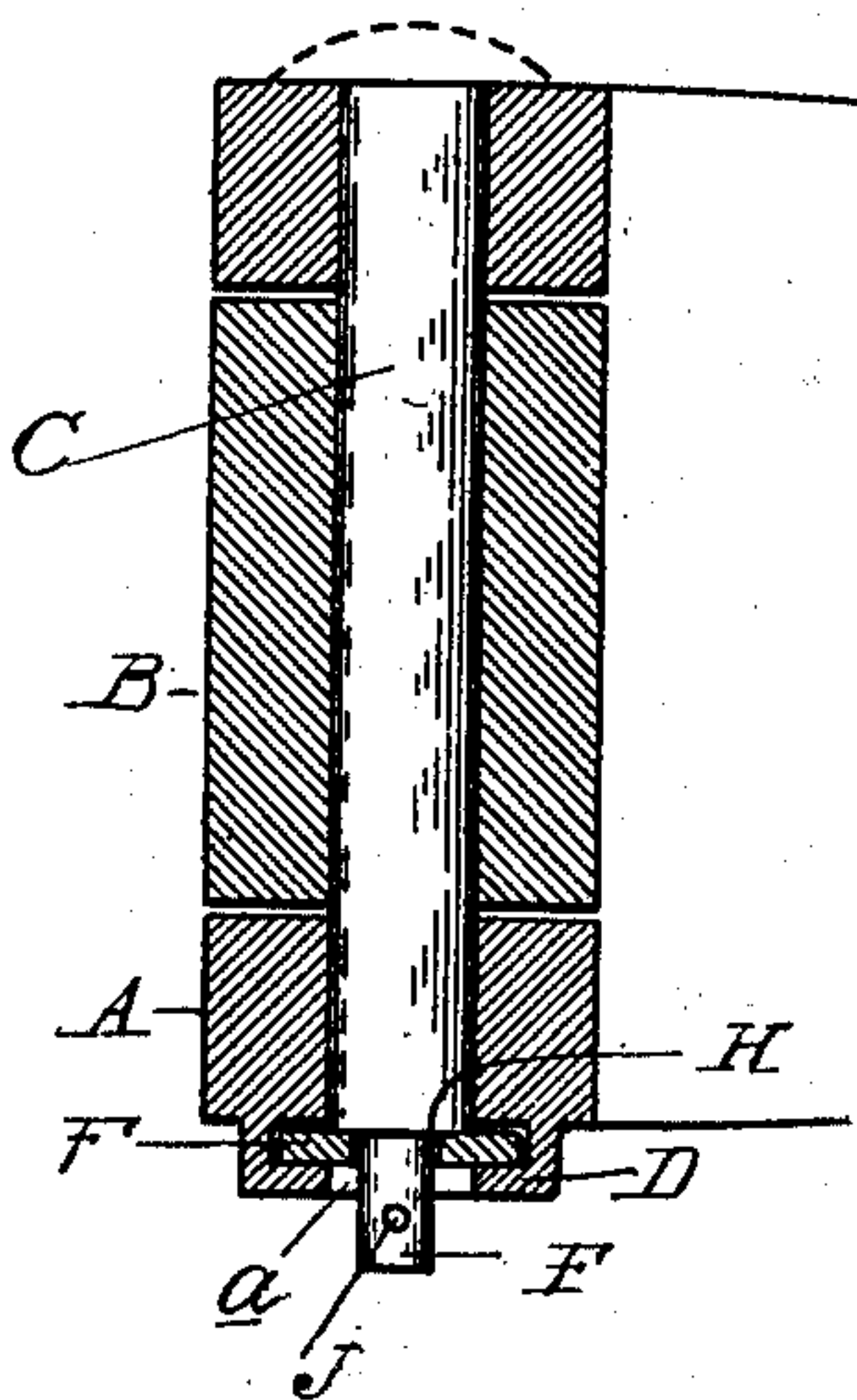
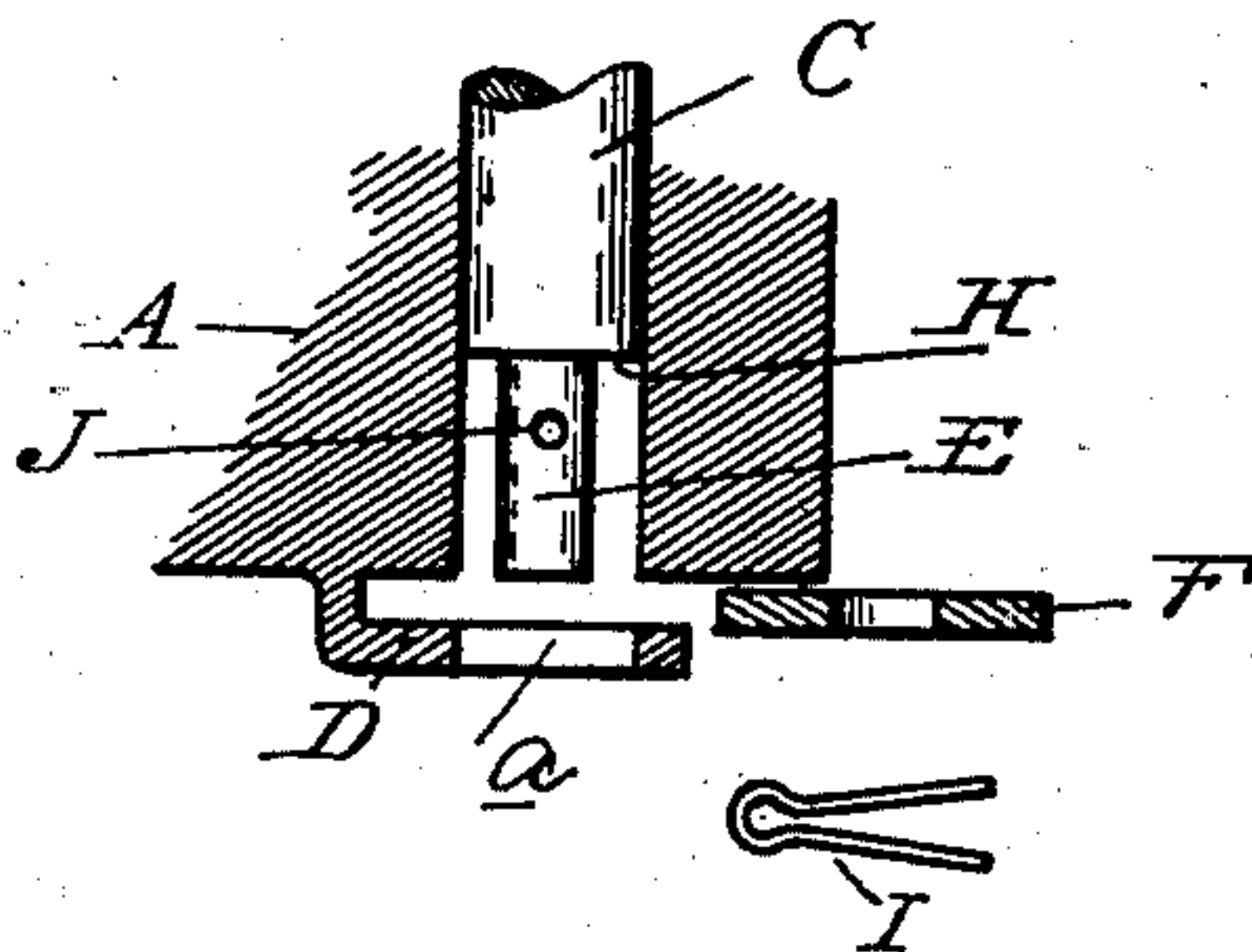


Fig. 3.



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UNITED STATES PATENT OFFICE.

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CAR-COUPLING.

SPECIFICATION forming part of Letters Patent No. 702,186, dated June 10, 1902.

Application filed January 14, 1902. Serial No. 89,707. (No model.)

To all whom it may concern:

Be it known that I, JAMES A. CHUBB, a citizen of the United States, residing at Detroit, in the county of Wayne and State of Michigan, have invented certain new and useful Improvements in Car-Couplers, of which the following is a specification, reference being had therein to the accompanying drawings.

The invention relates generally to car-couplers, and particularly to a fulcrum-pin for the swinging jaw of the coupler; and the invention consists in a support for said pin, as more fully hereinafter described, and particularly pointed out in the claim.

In the drawings, Figure 1 is a side elevation of a car-coupler, showing my improvement applied thereto. Fig. 2 is a vertical section on line $x x$, Fig. 1. Fig. 3 is a section through the lower end of the fulcrum of the draw-bar, illustrating the manner of removing the pin.

The present practice of railways is to build couplers having a swinging jaw hinged to the draw-bar by a vertical fulcrum-pin, the pin having a head resting on top of the draw-bar, and necessitating its removal upwardly. In freight-cars there is no difficulty in doing this; but in passenger-cars the present form of buffers overhangs the fulcrum-pin, so that to remove the pin it is necessary to remove the buffer or the draw-bar from the car.

One of the features of my invention consists in providing a detachable support for the pin below, which when withdrawn permits of removing the pin downwardly, the pin in this case being made without the head, and the means by which I do it is simple and inexpensive and without weakening the fulcrum-pin.

A represents the draw-bar, B the swinging jaw, and C the fulcrum-pin, and I show in dotted lines in Fig. 2 the usual form of head on the pins now in use.

For use in connection with passenger-cars the pin is plain, the head being omitted. On the lower face of the draw-bar, beside the fulcrum-pin, I form, preferably by casting integral with the draw-bar, the bracket D, having an aperture a in line with the fulcrum-pin of a size to permit its passage there-through. I provide the fulcrum-pin with the reduced lower end E, which for convenience

of reference I call a "pintle," and a washer F, having an aperture permitting the passage of the pintle therethrough, these parts being shown in Figs. 2 and 3. The fulcrum-pin being inserted in place and lifted a little, so that the washer F may be inserted on the bracket D, the pin is again lowered, its pintle passing through the aperture in the washer, and the shoulder H on the fulcrum-pin, around the pintle, resting on the washer. The pintle thus holds the washer on the bracket and supports the pin in position. This is all that is required; but I may for security insert the split pin I through an aperture J in the pintle to prevent the possibility of the pintle jumping out of the washer. To remove the fulcrum-pin, it is only necessary to lift the pin until its pintle clears the washer, remove the washer, and then remove the pin downwardly.

A support for the fulcrum-pin as set forth not only allows the pin to be downwardly removed when the pin is headless or plain, but also in case of the breakage of the pin retains the parts thereof in position in the coupler, and thus in many cases prevents the couplers from separating. As the liability of breakage of the pin is as great, if not greater, in freight-cars than passenger-cars, it will be obvious that a support for the pin is desirable for the couplers in both types of car. In freight-cars, however, as no difficulty is experienced in removing the pin upwardly, the usual headed pin may be employed and the support may be rigid instead of detachable, as heretofore described.

What I claim as my invention is—

In a car-coupler, the combination of the draw-bar, the swinging jaw, an apertured bracket secured to and projecting beneath the bar, a laterally-removable washer mounted upon the bracket, and the fulcrum-pin supported at its lower end upon the washer and carrying a pintle extending through the washer and bracket.

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

JAMES A. CHUBB.

Witnesses:

M. B. O'DOHERTY,
H. C. SMITH.