(No Model.)

# A. B. LUTHER.

## CAR COUPLING.

No. 478,620. Patented July 12, 1892.

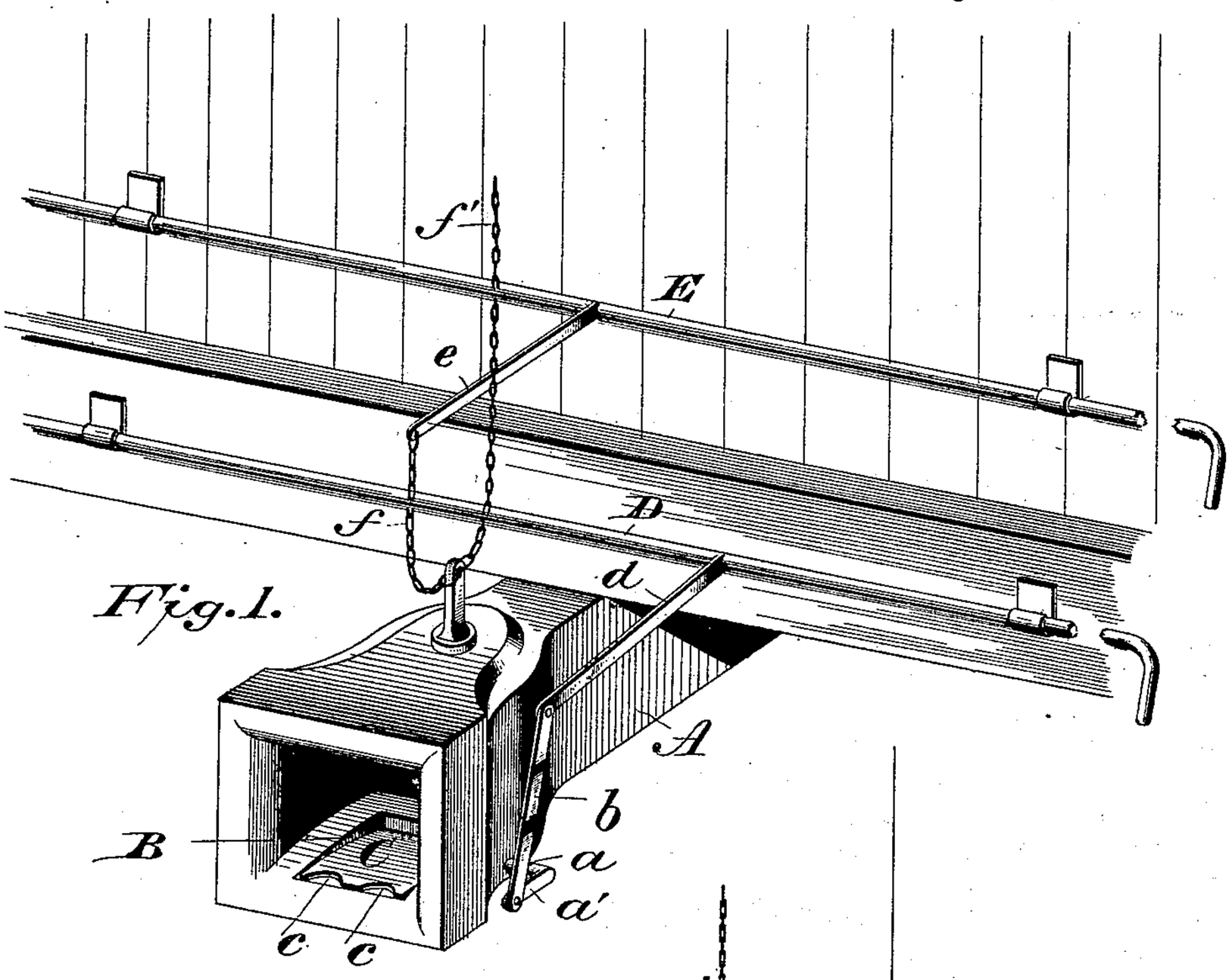


Fig. 1.

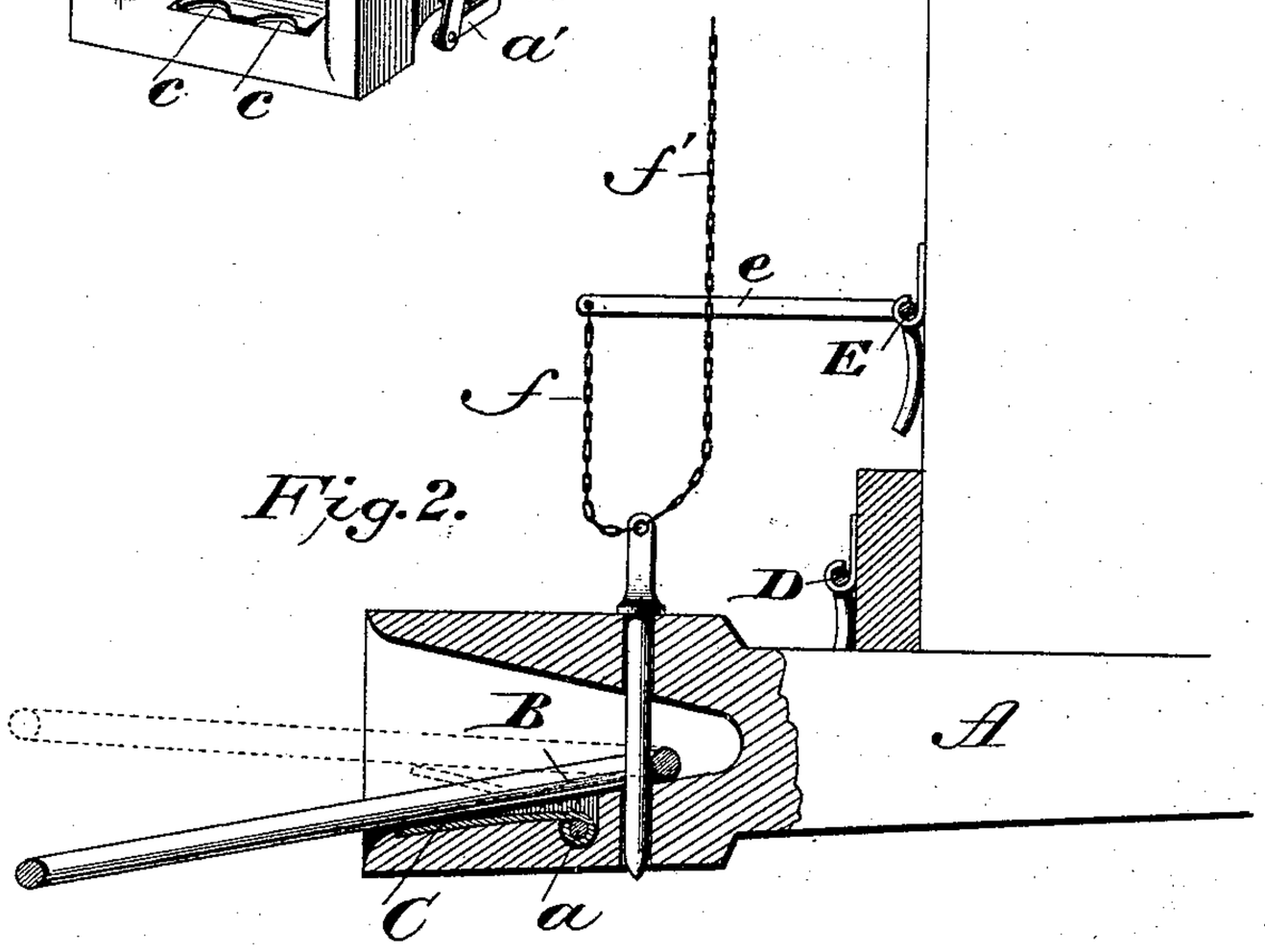


Fig. 2.

Witnesses
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# UNITED STATES PATENT OFFICE.

AREOUS B. LUTHER, OF TENNESSEE CITY, TENNESSEE, ASSIGNOR OF ONE-HALF TO JAMES C. FOSTER, OF SAME PLACE.

## CAR-COUPLING.

SPECIFICATION forming part of Letters Patent No. 478,620, dated July 12, 1892.

Application filed February 18, 1892. Serial No. 422,001. (No model.)

*To all whom it may concern:*

Be it known that I, AREOUS B. LUTHER, a citizen of the United States of America, residing at Tennessee City, in the county of Dickson and State of Tennessee, 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, reference being had to the accompanying drawings, and to letters of reference marked thereon, which form a part of this specification.

This invention relates to improvements in car-couplings.

The object of the invention is to provide a draw-head with means for holding the link in different positions, so that it will enter the adjacent draw-head, though said draw-head be at a different level; also, to provide means for raising the pin so that it can be operated from the top or one side of the car; and the invention consists in the construction and combination of the parts, as will be hereinafter fully set forth, and specifically pointed out in the claim.

In the accompanying drawings, forming part of this specification, Figure 1 is a perspective view of a car-coupling constructed in accordance with my invention. Fig. 2 is a vertical sectional view.

A designates the draw-head, which is connected to the car in the usual manner. The mouth of this draw-head has the lower wall recessed, as shown at B, and through the rear portion of this recess passes a shaft *a*, to which is rigidly attached a plate C, the forward end of which is recessed at *c c* to receive the side bars of the link, so as to form a rest for said link and position it centrally in the mouth of the draw-head. The shaft *a* has bearing in apertures in the sides of the draw-head and projects beyond one side and is bent forward to provide a crank-arm *a'*. This crank-arm is connected by a link or rod *b* to an arm *d*, extending from a shaft D, which is supported in suitable hangers above the draw-head, the ends of said shaft being bent to provide means for rocking the same. It will be obvious that by partially turning this shaft the plate C is raised or lowered, and that when it is lowered it will lie entirely within the recess, and when elevated will support the link either in a horizontal position or at an angle.

To the car above the shaft D is suitably hung a shaft E, provided with a forwardly-projecting arm *e*, which is connected at its outer end by a flexible connection *f* to the head of the coupling-pin, so that when said shaft is turned it will raise or lower the coupling-pin. The coupling-pin can also be manipulated from the top of the car by a flexible connection *f'*. The length of the flexible connection *f* is such that when the shaft E is turned the coupling-pin will not be entirely withdrawn from the draw-head. The coupling-pin can be held in an elevated position by turning the shaft E so that the arm *e* thereof will be thrown beyond the perpendicular toward the body of the car, and when in this position the jar occasioned by the cars coming together will be sufficient to throw the arm *e* forward and allow the pin to fall so that the cars will couple. The head of the pin is extended, so that said pin can be retained in an inclined position, with its point within the aperture in the draw-head and in a position out of engagement with the link.

Having thus described my invention, what I claim as new, and desire to secure by Letters Patent, is—

In a car-coupling, the draw-head A, having a recess B on the inner side of its base, a plate C, having recesses *c c* in its front end, a shaft *a*, to which said plate is rigidly secured, said shaft having a forwardly-projecting arm *a'*, and a link *b*, pivoted to said arm and to a forwardly-projecting arm *d*, carried by a rock-shaft D, attached to the car-body, substantially as shown and for the purpose set forth.

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

AREOUS B. LUTHER.

Witnesses:
M. V. SMITH,
W. M. ADAMS.