

A. KIMBER.  
Car-Couplings.

No. 154,491.

Patented Aug. 25, 1874.

Fig. 1.

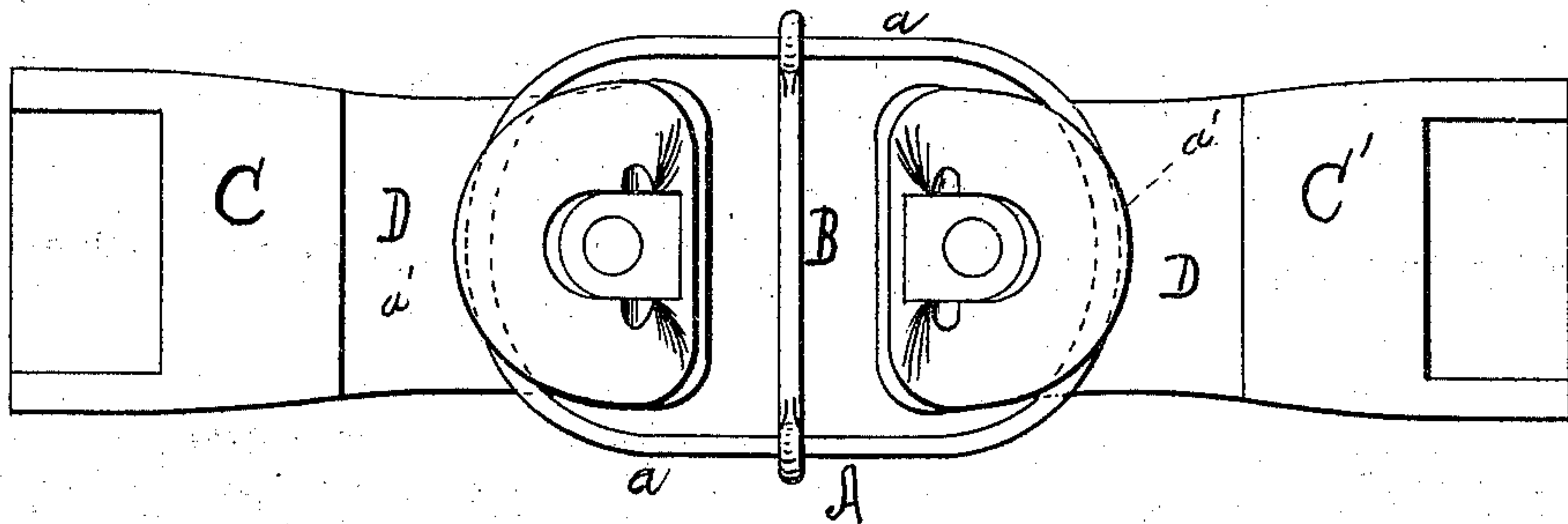


Fig. 2.

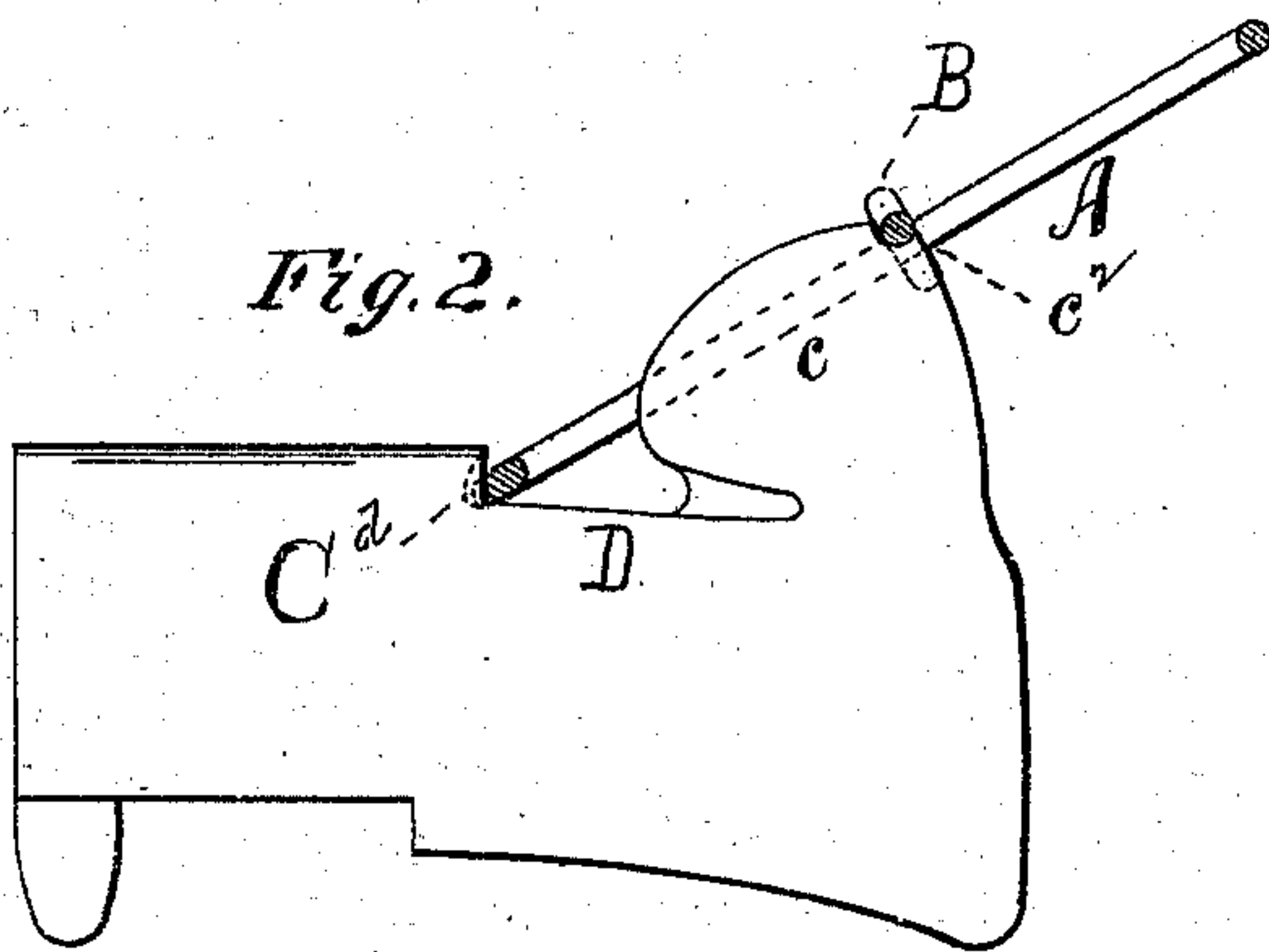


Fig. 3.

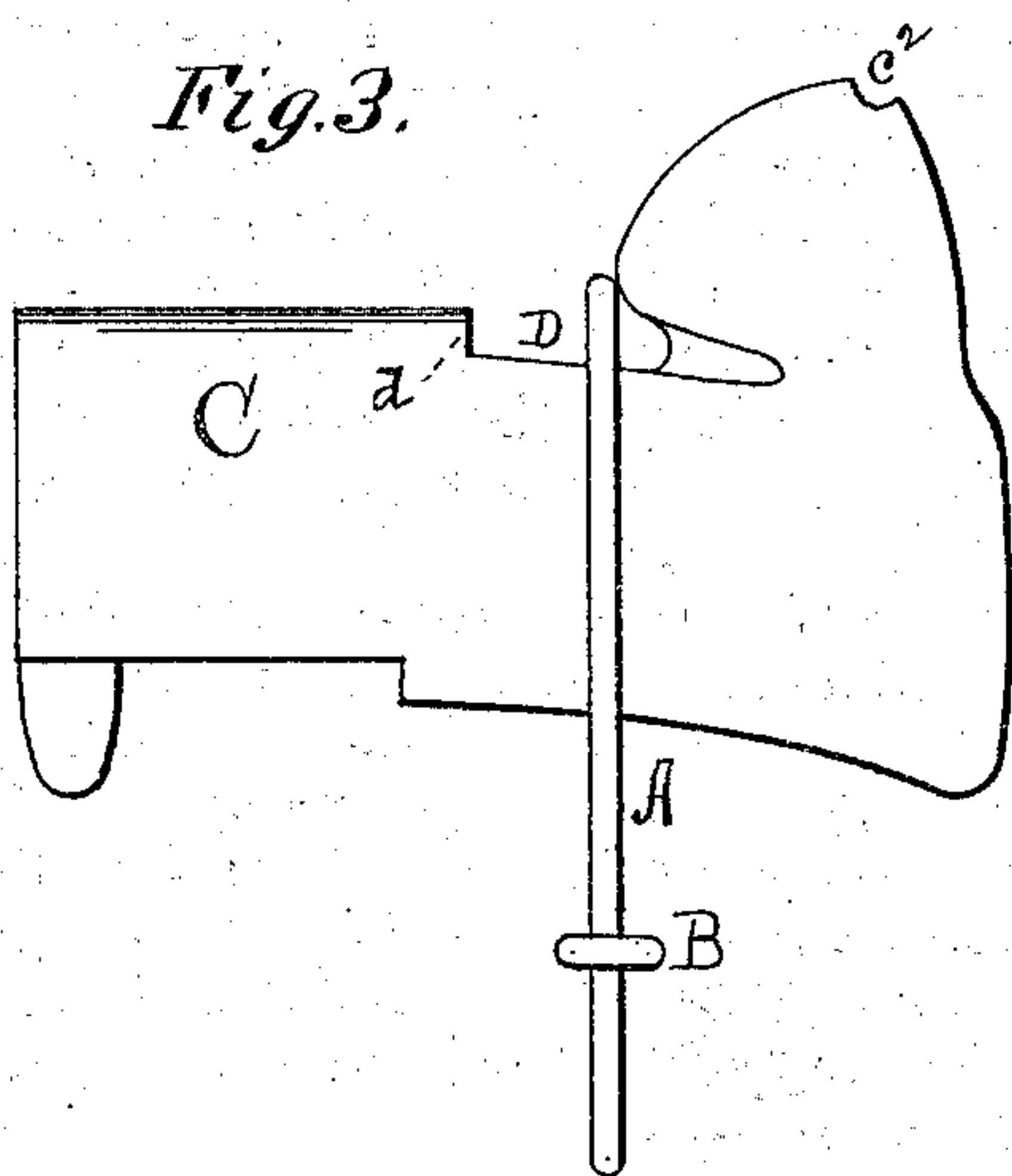
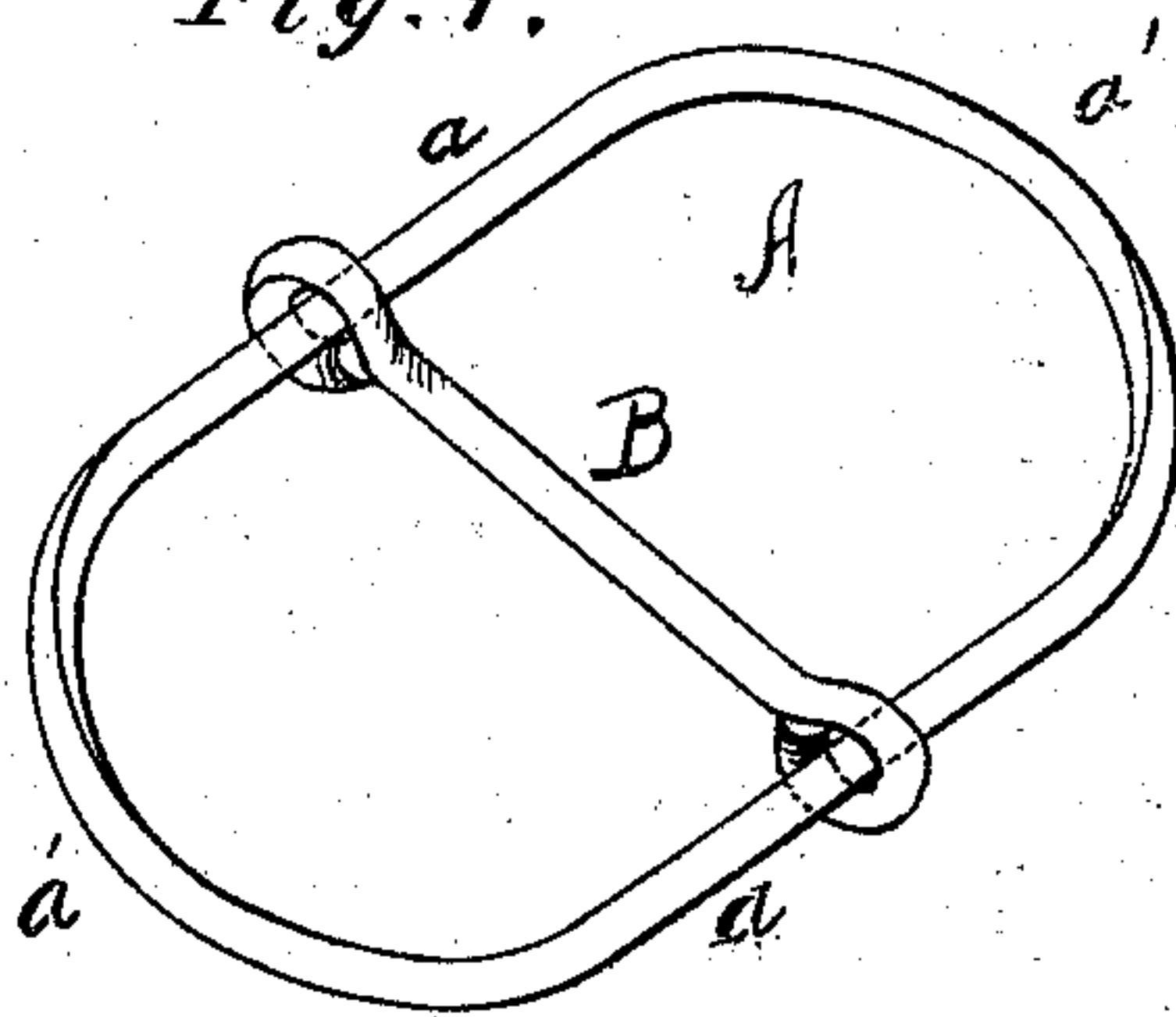


Fig. 4.



WITNESSES  
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# UNITED STATES PATENT OFFICE.

ABRAHAM KIMBER, OF MUNCIE, INDIANA.

## IMPROVEMENT IN CAR-COUPPLINGS.

Specification forming part of Letters Patent No. **154,491**, dated August 25, 1874; application filed June 6, 1874.

*To all whom it may concern:*

Be it known that I, ABRAHAM KIMBER, of Muncie, in the county of Delaware and State of Indiana, have invented a new and valuable Improvement in Coupling-Links; and I do hereby declare that the following is a full, clear, and exact description of the construction and operation of the same, reference being had to the annexed drawings making a part of this specification, and to the letters and figures of reference marked thereon.

Figure 1 of the drawing is a representation of a plan view of my car-coupling, and Figs. 2 and 3 are side views. Fig. 4 is a view of my coupling-link.

This invention has relation to coupling-links which are especially adapted to be used in connection with the draw-bars, for which Letters Patent were issued to me bearing date on the 17th day of February, 1874, and numbered 147,651; and it consists in a link of oblong form, which is provided with a sliding tie-bar, whereby said link is adapted to vibrate on one of its ends downwardly under the draw-head, when not required for coupling, and whereby cars, when coupled, may be brought into close contact without injuring or breaking said link, in combination with draw-bars having an elevated knob provided with a transverse notch to hold the tie-bar of the link, and a depressed shoulder in rear of the knob, to keep the link elevated and steady.

In the annexed drawings, A designates a coupling-pin, having its ends rounded or of prismatic form, and having its longer sides parallel the one to the other for a portion of their length. B designates a tie-bar, which is applied to the coupling-link in such manner that it shall slide freely upon the parallel parts, which I have designated by the letter *a*, in a direction perpendicular to its longer axis. C C' are two draw-bars having knobs *c* constructed upon their upper anterior surfaces. The rear surfaces of these knobs are curved, and are grooved at their point of union with the body of the draw-bar, to conform to the

contour of the inner surface of coupling-link A. D is a depression upon the upper surface of the draw-head, having a shoulder, *d*, at its inner end. *c*<sup>2</sup> is a transverse notch constructed upon the upper anterior surface of the knob *c*, which is adapted to receive the tie-bar B of the link A.

When it is desired to couple two cars, the end of link A is engaged with the shoulder *d* of depression D, and, its outer end being raised, the tie-bar B is placed in the notch *c*<sup>2</sup>, as shown in Fig. 2. The cars are then brought in contact, when any jar, however slight, will cause a disengagement of the tie-bar B from the notch *c*<sup>2</sup> and the rounded end of the link to fall over the knob *c* of the opposite draw-bar, and a coupling will be effected, as seen in Fig. 1. When a train is backed the draw-heads of cars will be brought in close contact, the link being in no danger of injury from jamming, as the distance between the shoulders *d* of contacting draw-bars is always a little greater than the length of the link. Two cars having been uncoupled and separated, and one end of the link being left over the knob *c*, the link A, owing to the gravitation of the tie-bar B, will assume a position under the draw-head at right angles to its former position, being out of the way, as shown in Fig. 3, of all injury from any shock which might then occur.

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

The combination, with the draw-bar C, having the elevated transverse notch *c*<sup>2</sup> and depressed shoulder *d*, of the coupling-link A, having the tie-bar B loosely applied to it to slide in the direction of the length of the link, substantially as and for the purpose set forth.

In testimony that I claim the above I have hereunto subscribed my name in the presence of two witnesses.

ABRAHAM KIMBER.

Witnesses:

GEORGE E. UPHAM,  
J. M. ABRAMS.