

(No Model.)

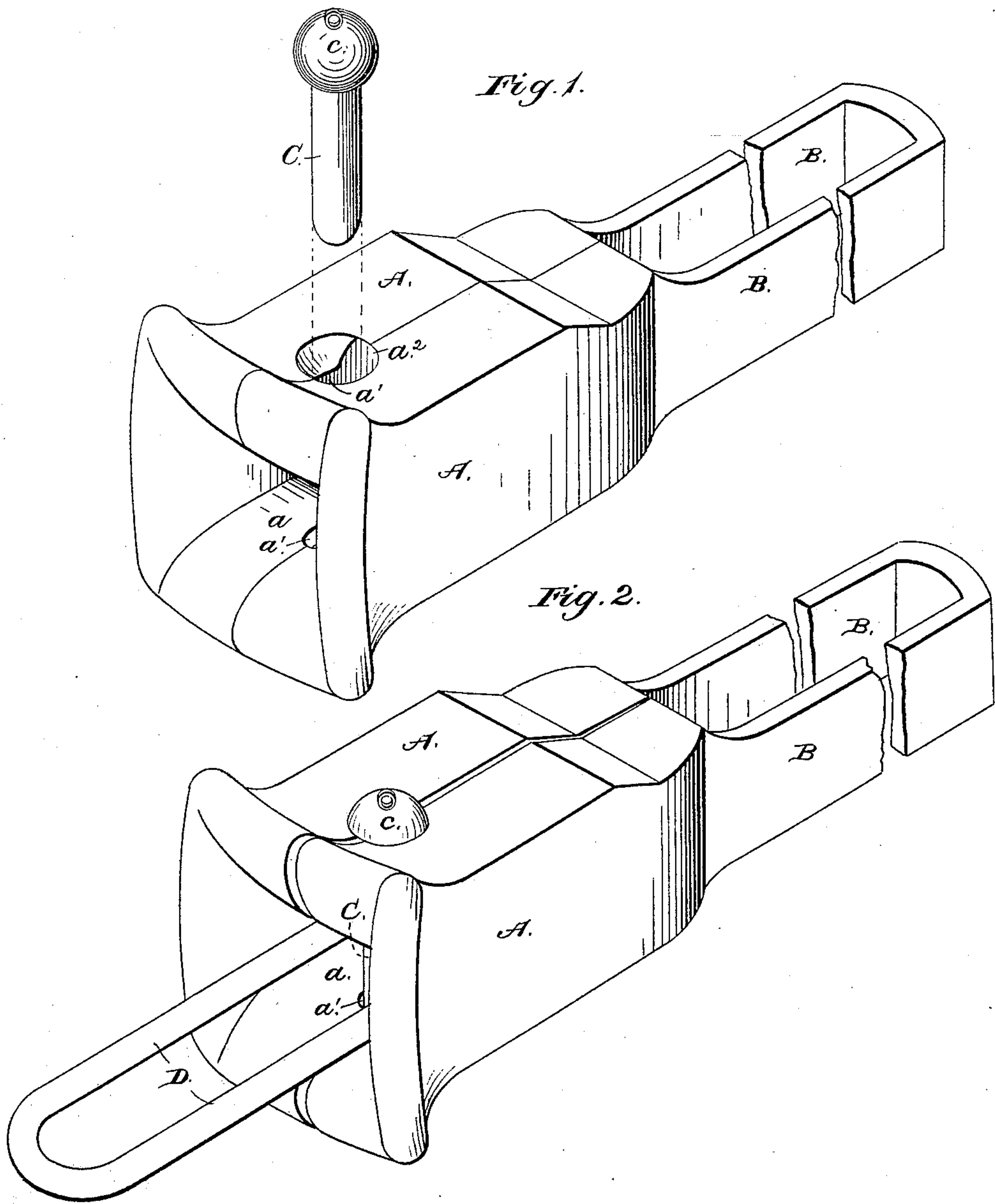
2 Sheets—Sheet 1.

W. R. JONES.

CAR COUPLING.

No. 245,837.

Patented Aug. 16, 1881.



Witnesses.

Jas. E. Hutchinson.  
Henry C. Hazard

Inventor.

Wm. R. Jones, by  
Geo. S. Quindley, his Att'y

(No Model.)

2 Sheets—Sheet 2.

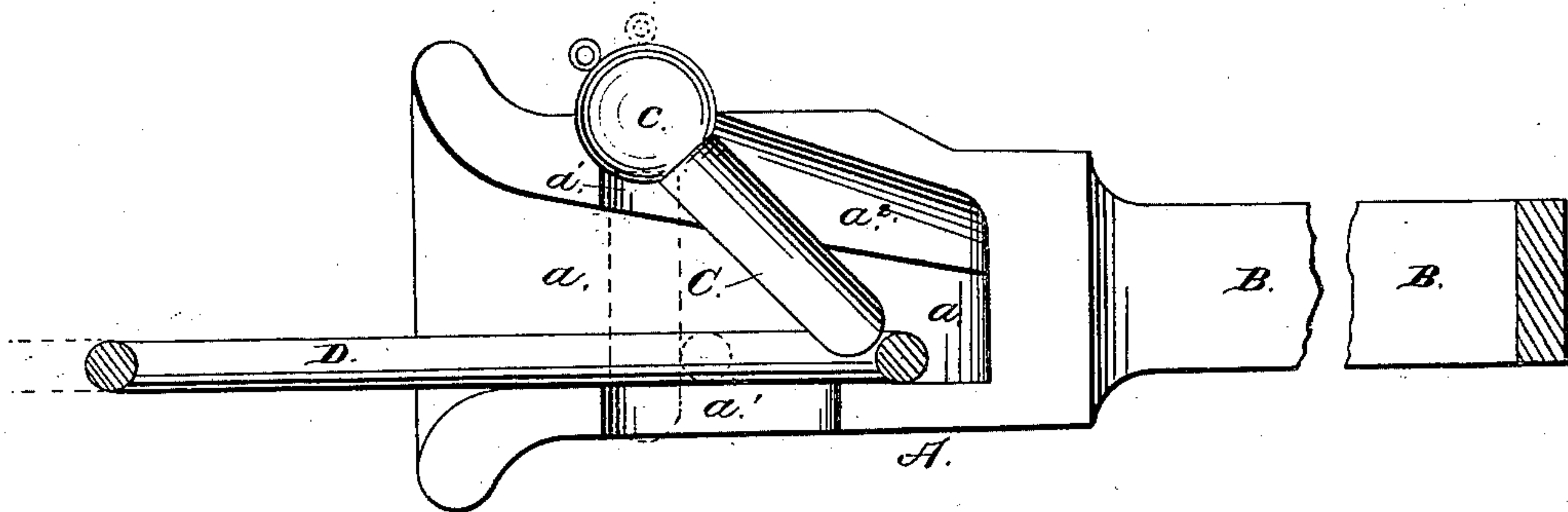
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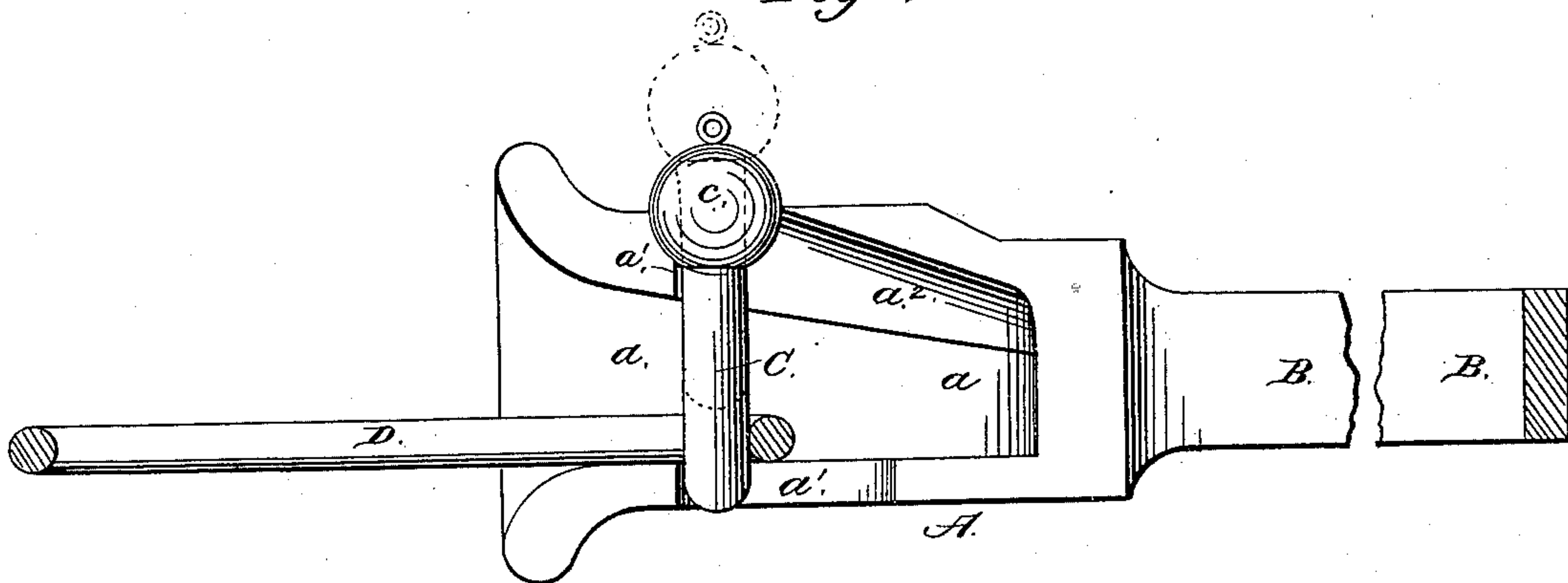
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*Fig. 3.*



*Fig. 4.*



*Witnesses.*

*Jas. E. Hutchinson.*  
*Henry C. Hazard*

*Inventor.*

*Wm R. Jones, by*  
*Geo. S. Pindle, his Atty*



# UNITED STATES PATENT OFFICE.

WILLIAM R. JONES, OF ATLANTA, GEORGIA, ASSIGNOR, BY MESNE ASSIGNMENTS, TO THE EXCELSIOR LIFE SAVING CAR COUPLING COMPANY, OF NEW YORK, N. Y.

## CAR-COUPLING.

SPECIFICATION forming part of Letters Patent No. 245,837, dated August 16, 1881.

Application filed April 27, 1881. (No model.)

*To all whom it may concern:*

Be it known that I, WILLIAM R. JONES, of Atlanta, in the county of Fulton, State of Georgia, 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 thereof, reference being had to the accompanying drawings, making a part of this specification, in which—

Figure 1 is a perspective view of my improved device, the several parts being separated from each other. Fig. 2 is a like view of the same combined, and with the sections of the draw-head slightly separated. Fig. 3 is a central longitudinal section of said draw-head, the full lines showing the positions of parts when the link is about to pass into engagement with the coupling-pin, and the dotted lines their positions after engagement has taken place; and Fig. 4 is a like view of the same, the full lines showing the normal positions of parts, and the dotted lines their positions when the coupling-pin is raised to release the link.

Letters of like name and kind refer to like parts in each of the figures.

The object of my invention is to insure the instantaneous disconnection of cars when one of the same leaves the track; and to this end it consists, principally, in a draw-head which is divided longitudinally into two sections that are separable by lateral pressure upon the coupling-link, and are united and held in normal position by means of a U-shaped spring, substantially as and for the purpose hereinafter specified.

It consists, further, in a draw-head composed of two separable longitudinal sections, which are united by means of a spring, in combination with a swinging unhinged coupling-pin having a spherical head and corresponding bearing, substantially as and for the purpose hereinafter shown.

In the annexed drawings, A represents a draw-head, which has the usual exterior form, and is provided with a recess, *a*, for the reception of a link, that, at its front end, has a flaring or bell-mouth shape, from whence to its rear end the upper side of said recess has a

rearward and a downward inclination. The draw-head A is composed of two parts or sections, which are united upon a vertical central longitudinal line, and are connected together and held in their normal positions by means of a U-shaped spring, B, that is secured to and extends rearward from the rear ends of said sections.

Passing vertically through the draw-head A, at the line of division between its sections, is an opening, *a'*, which at its upper end is round, and within the lower portion of said head is elongated rearwardly, as shown in Figs. 3 and 4. At its upper end the opening *a'* is enlarged and made semi-spherical, and within the same is loosely fitted a coupling-pin, C, which has a plain cylindrical body and a spherical head, *c*, said head corresponding to and filling said enlarged portion of said opening.

Between the upper end of the opening *a'* and the rear end of the recess *a* a recess, *a''*, is formed, within the upper side of the latter, which has sufficient dimensions to permit the lower end of the coupling-pin C to swing rearward and upward to the position shown in Fig. 3, during which movement the spherical head *c* operates as a pivotal bearing for said pin. If now, a link, D, is inserted within the draw-head A and moved longitudinally rearward, its end will engage with the pin C and swing the same rearward and upward until the lower end of said pin is sufficiently elevated to permit said link to pass beneath, as seen in Fig. 3, after which said pin will drop to its normal position and lock said link in place, as shown in Fig. 4. The downward and rearward inclination of the upper side of the recess *a* operates to guide the inner end of said link to the lower side of said recess. To release said link it is only necessary that said pin should be raised vertically until its lower end is above said link, as seen by the dotted lines of Fig. 4.

Should a car provided with my couplings jump the track the lateral pressure upon the link which would be instantly caused by the change of position would operate to separate the sections of the draw-head until the coupling-pin was released and said link disengaged,

after which the derailed car could pursue its course without dragging other cars from the track. No injury would result from such lateral separation of the sections of the draw-head, as the uniting-spring would close the same together again as soon as the link and pin were withdrawn.

Having thus fully set forth the nature and merits of my invention, what I claim as new is—

- 10 1. A draw-head which is divided longitudinally into two sections that are separable by lateral pressure upon the coupling-link, and are united and held in normal position by means of a U-shaped spring, substantially as and for  
15 the purpose specified.

2. A draw-head composed of two separable longitudinal sections, which are united by means of a spring, in combination with a swinging unhinged coupling-pin having a spherical head and corresponding bearing, substantially as and for the purpose shown.

In testimony that I claim the foregoing I have hereunto set my hand in the presence of witnesses.

WILLIAM ROBERTSON JONES.

Witnesses:

GEO. T. KERSHAW,

I. GADSDEN KING.