

L. P. BAILEY.

CAR-COUPLING.

No. 180,310.

Patented July 25, 1876.

Fig. 1.

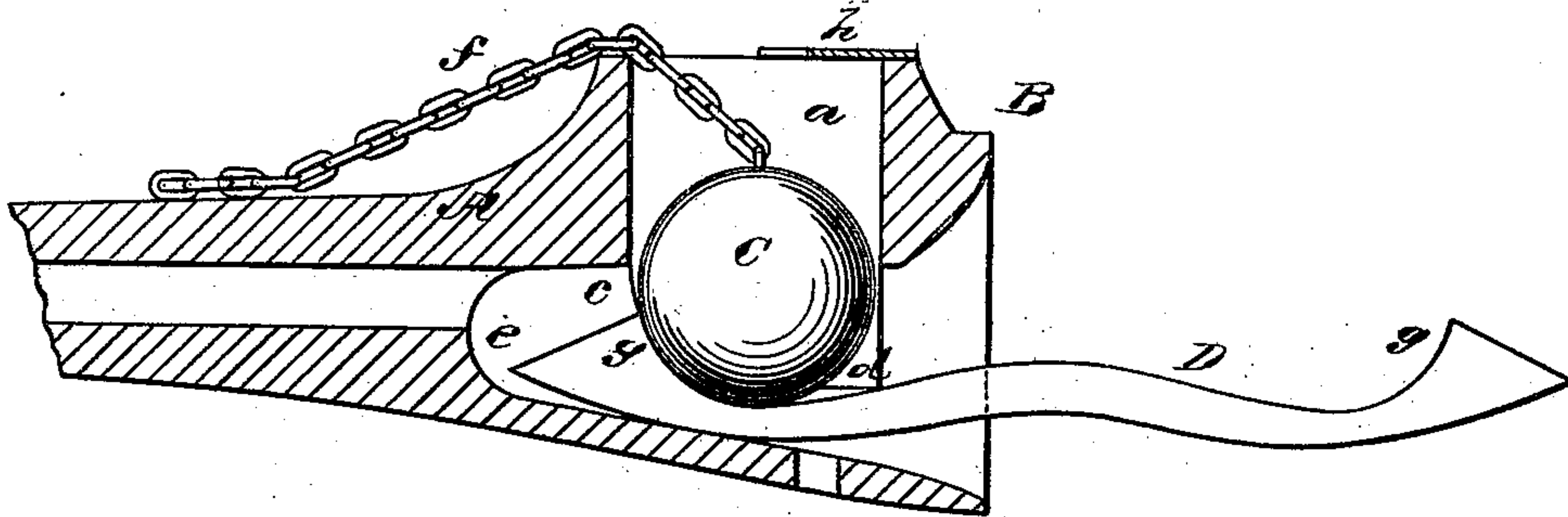


Fig. 2.

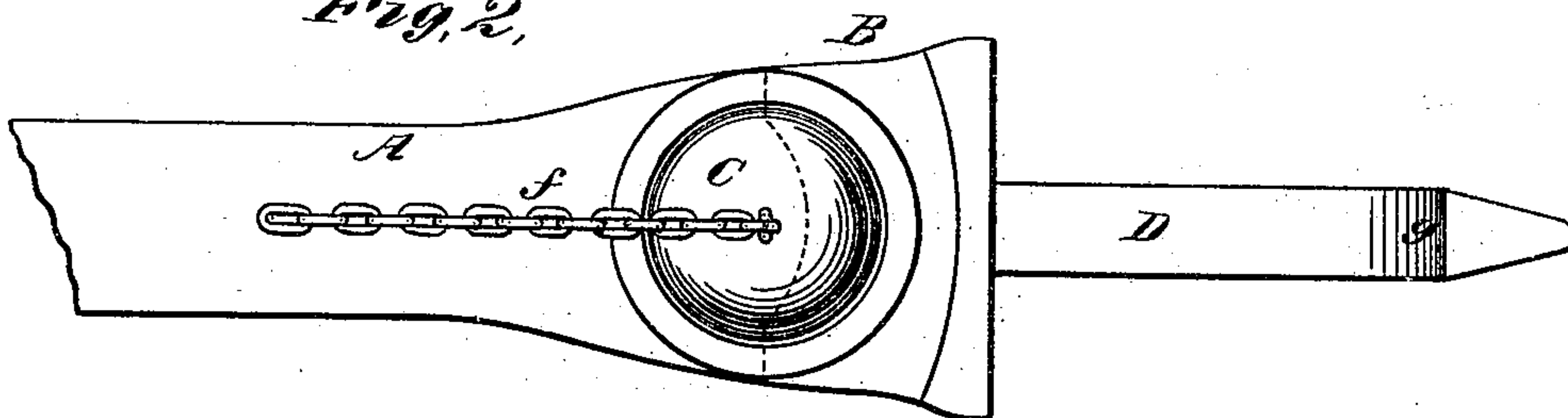
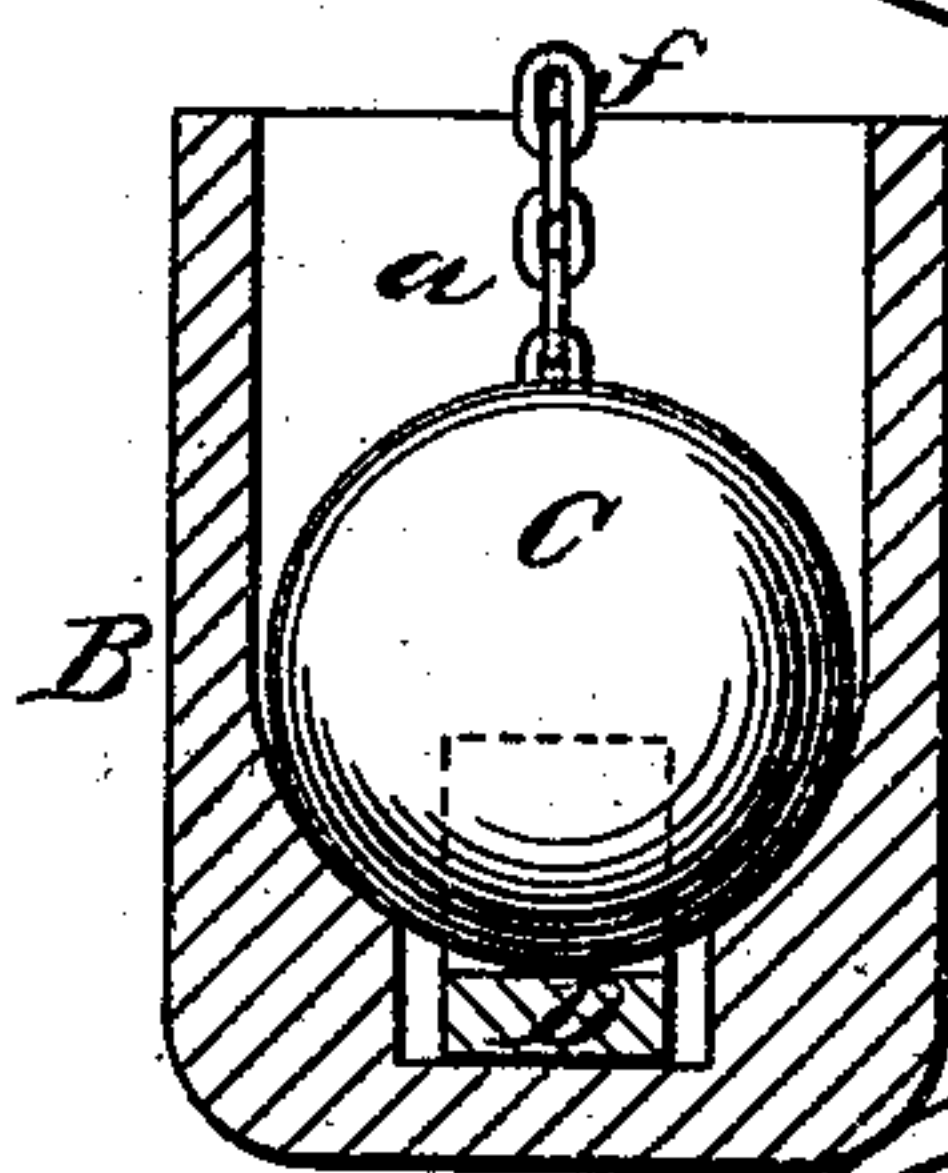


Fig. 3.



Fig. 4.



WITNESSES

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# UNITED STATES PATENT OFFICE.

LEWIS P. BAILEY, OF HELENA, ARKANSAS.

## IMPROVEMENT IN CAR-COUPPLINGS.

Specification forming part of Letters Patent No. **180,310**, dated July 25, 1876; application filed June 24, 1876.

*To all whom it may concern:*

Be it known that I, LEWIS P. BAILEY, of Helena, in the county of Phillips and State of Arkansas, have invented a new and valuable Improvement in Car-Couplers; 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 drawings is a representation of a longitudinal vertical section of my car-coupling, and Fig. 2 is a plan view thereof. Fig. 3 is a side view of the coupling-bar, and Fig. 4 is a transverse vertical sectional view of my car-coupling.

This invention has relation to automatic or "self-couplers;" and the nature of my invention consists in a coupling-head of peculiar construction, which is adapted to receive a coupling-sphere in combination with a hooked coupling-bar, which is of such form that it will couple at different angles and allow free lateral and vertical motions to the cars, as will be hereinafter explained.

In the annexed drawings, A designates part of a draw-bar, on which an enlargement, B, is formed. The enlargement B is constructed with a vertical space, *a*, leading down into a chamber, *c*, the front end of which flares outwardly. The intermediate portion has a narrow floor, above which are two shoulders, *d*, and the rear portion of which is contracted, as indicated by the letter *e*. C designates a spherical ball, to which a chain, *f*, or its equivalent, is suitably attached, that extends up through the space *a* and is fastened to the platform of the car in a convenient place for use. D designates a

coupling bar or link, which is constructed with hooks *g g*, tapered laterally and vertically, and which is also constructed with a shank which is curved, as shown in Figs. 1 and 3.

The curve last described allows the bar D to vibrate vertically and accommodate itself to the vertical movements of the cars.

When a bar, D, is thrust into the chamber *c* of the draw-head, the ball C will engage with the hooked end *g* and effect a coupling. The ball can be raised by means of the chain *f* when it is desired to uncouple. In the event of a car jumping the track, the bar D will disengage itself from the draw-bar and automatically uncouple the cars. In practice, a crescentic plate, *h*, may be secured on the top of the head of the draw-bar for the purpose of preventing displacement of the coupling-ball C. I may, when occasion requires, perforate the floor of the chamber *c* to allow a coupling to be made by means of a common link and pin.

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

1. A draw-bar constructed with a space, *a*, and a chamber, *c*, constructed with a narrow floor and two shoulders, *d*, in combination with a coupling-ball, C, substantially as described.

2. In combination with a coupling-ball, C, the bar D, hooked, pointed, and curved as shown.

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

LEWIS P. BAILEY.

Witnesses:

JOHN F. ACKER,  
GEORGE E. UPHAM.