

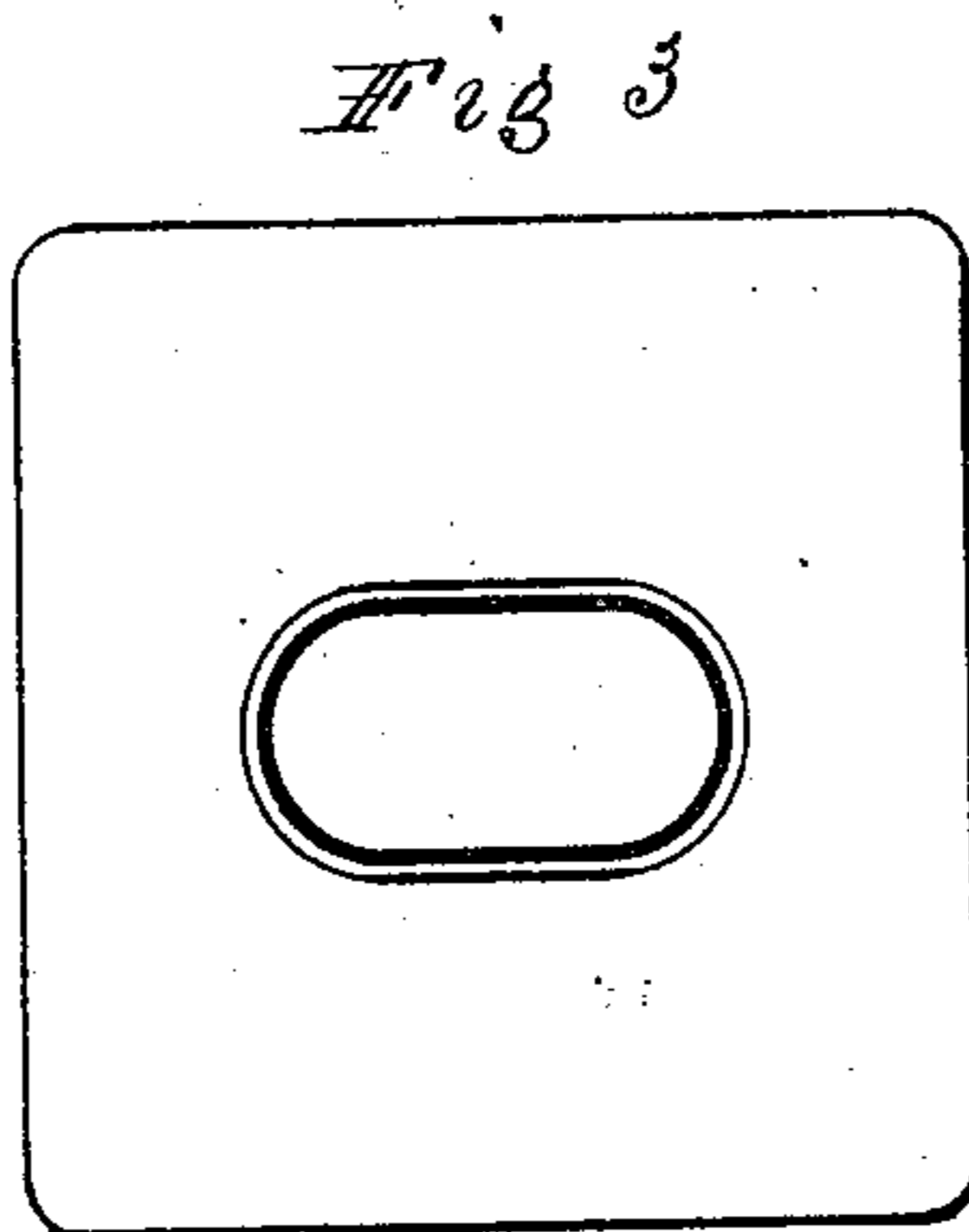
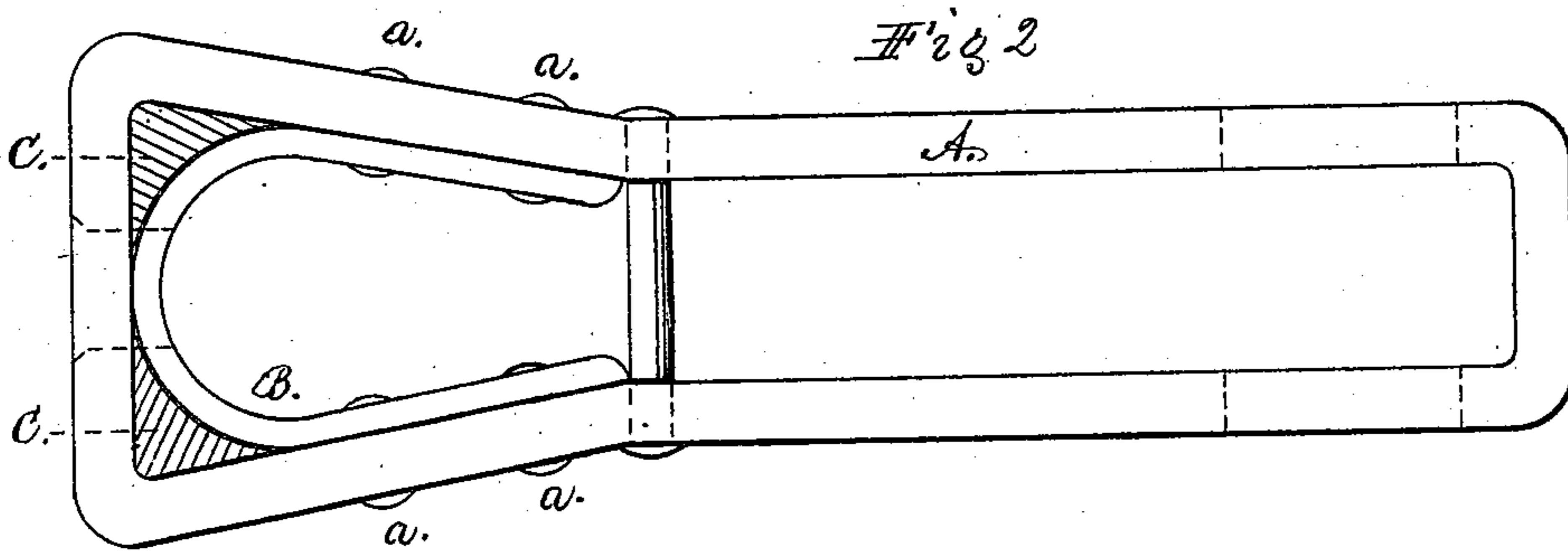
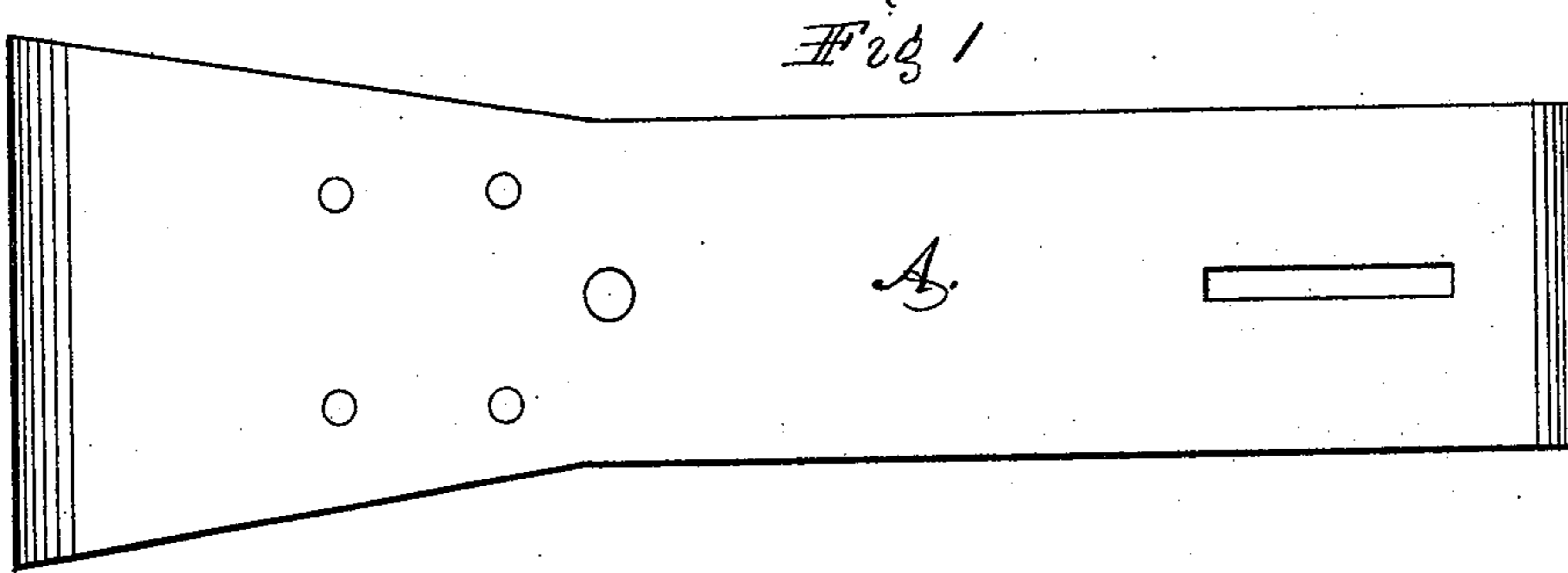
(No Model.)

2 Sheets—Sheet 1.

W. S. SAMPSON.  
Car Coupling.

No. 229,916.

Patented July 13, 1880.



Witnesses.  
Homer S. Beardsley  
Edw. A. Ritter

Inventor.  
Wm S. Sampson

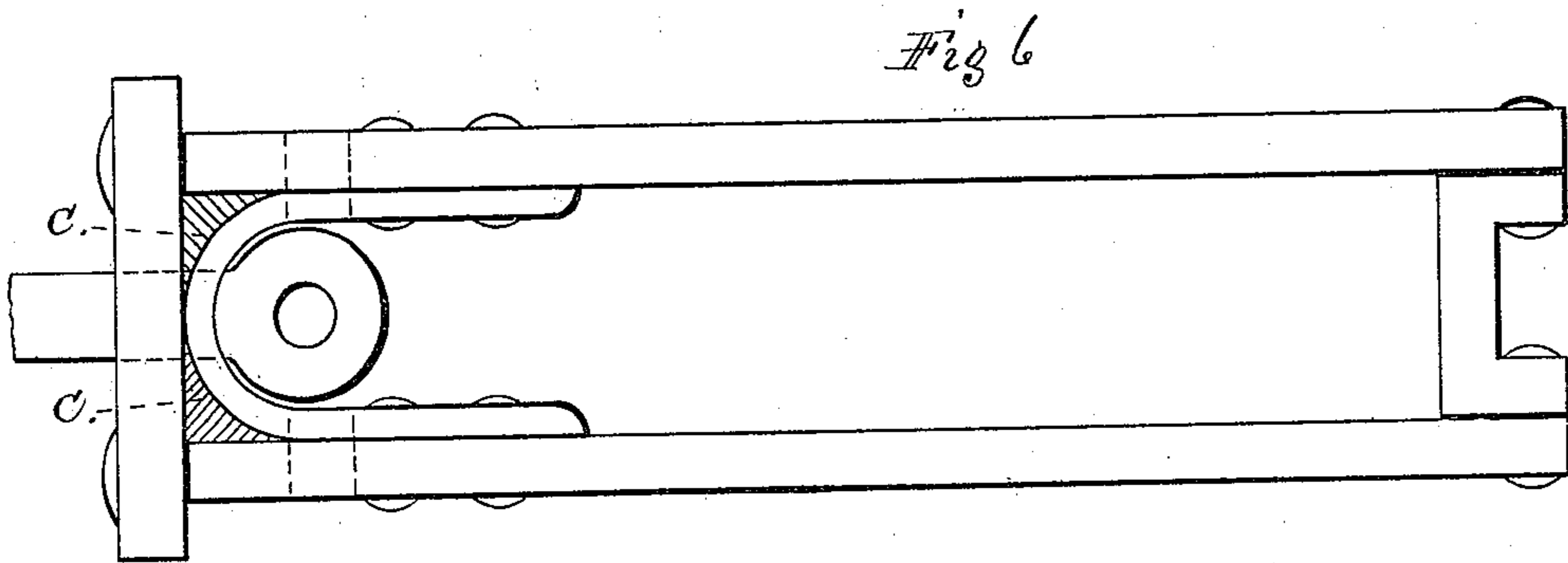
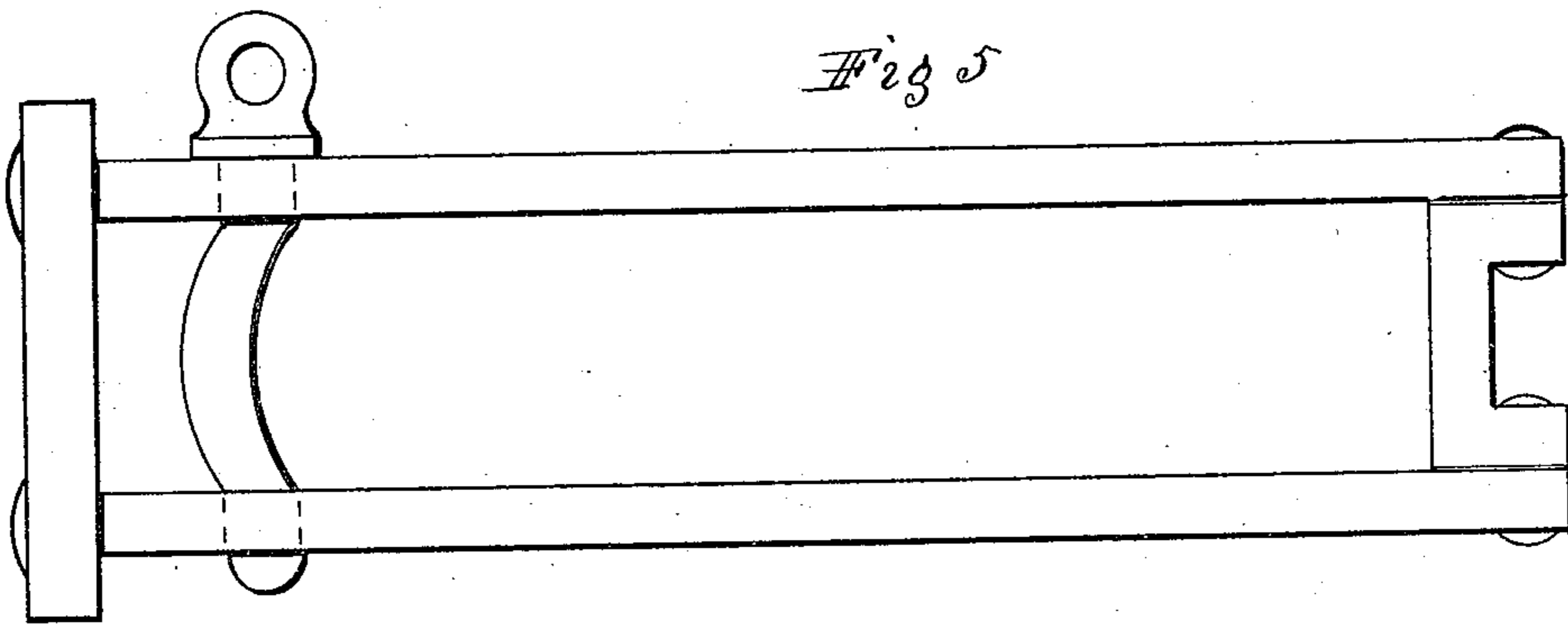
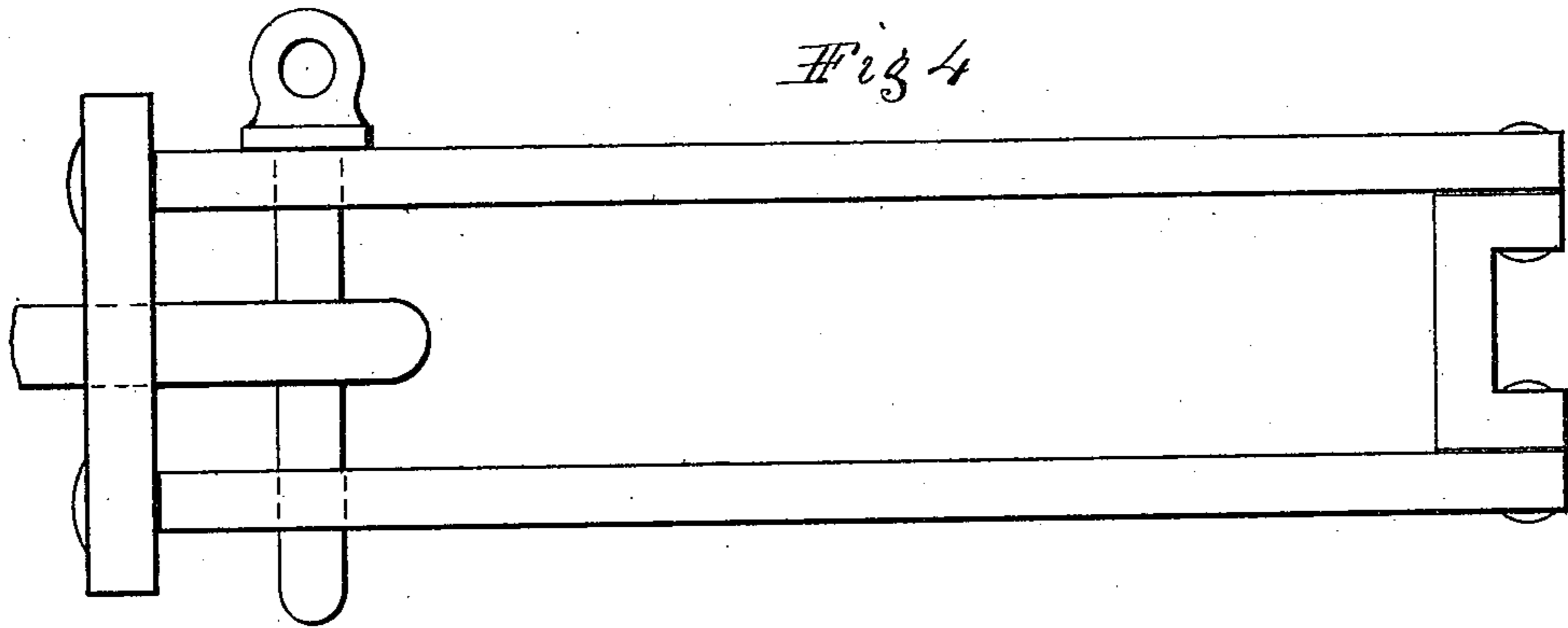
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Homer S. Beardsley.  
Edw. H. Butler,

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# UNITED STATES PATENT OFFICE.

WILLIAM S. SAMPSON, OF NEW YORK, N. Y.

## CAR-COUPLING.

SPECIFICATION forming part of Letters Patent No. 229,916, dated July 13, 1880.

Application filed March 12, 1880. (No model.)

*To all whom it may concern:*

Be it known that I, WM. S. SAMPSON, of the city, county, and State of New York, have invented an Improvement in the Construction of Draw-Bars or Bunters for Cars or similar Vehicles, of which the following is a specification.

The purpose of this invention is to provide a draw-bar or bunter for cars or similar vehicles which in itself will combine the requisite strength for drawing the load with the proper resisting force against concussion. I attain these objects by the mechanism illustrated in the accompanying drawings, in which—

Figure 1 is a side elevation of my improved draw-bar or bunter. Fig. 2 is a top view of same. Fig. 3 is an elevation of the front or face. Fig. 4 is a side elevation of the draw-bar or bunter in common use, with the present chain-link and pin in place. Fig. 5 is a similar view with the link removed, exhibiting the bent condition of the pin after certain service. Fig. 6 is a view of the same, showing the application of my abutment to the present draw-bar, using the single link, as seen. This application of the abutment does not interfere with the employment of the chain-link and pin. The position of the pin-hole is shown in the dotted lines of this figure.

The same letters of each figure designate the same parts.

In Figs. 1 and 2, A is the main portion of the new draw-bar. B is the abutment in the rear of the head, fastened to the main bar at *a a*. C is wood forced into the spandrels, as a certain support to the face of the bar and to the abutment.

The invention consists of a bar with an enlarged head or face for the main portion, and a curved abutment in the rear of the face for the minor portion; also, a stud in the rear of the enlarged head, uniting the sides of the bar. The face of the bar is cut out for the entry of the link, the same as in ordinary draw-bars. The enlarged head contracts from the face toward the main part of the bar in regular slope.

The main part then extends to the rear end itself, forming the end by a weld in the metal, concluding the bar in one piece.

The curved abutment partakes of the outline of a horseshoe, and is set in the rear of the face and fastened to the contracted sides of the enlarged head. It is also pierced through the face to receive the link. The crown of the arch of this abutment is in contact with or lies near the rear of the face of the main bar, acting as a support against concussion and forming an easy and reliable seat for the head of the draw-link. The spandrels between the head and the crown of the abutment are filled with wood or some other suitable material. The draw-bars of freight-cars, when made of wrought-iron, have hitherto been made of many pieces.

The main advantages of my construction consist, first, in the bar proper being composed of one piece only; second, the head being formed by an enlargement of the main portion of the bar itself; third, of an abutment in the rear of the face of the bar; and, fourth, of a certain amount of elasticity in the bar, by reason of filling the spaces between the abutment and the head of the bar with wood or an equivalent material.

I claim—

1. A draw-bar or bunter with an enlarged head, in combination with an abutment in the rear of the head and the wood filling, or its equivalent, substantially as shown and described.

2. A curved abutment placed in the rear of the head of a draw-bar or bunter, in combination with a wood filling, substantially as shown and described.

3. A wood filling, or its equivalent, placed in the spaces between the head of a draw-bar or bunter and a curved abutment, substantially as shown and described.

WM. S. SAMPSON.

Witnesses:

HOMER S. BEARDSLEY,  
EDWD. D. BUTLER.