

W. H. WILSON.
Car-Couplings.

No. 152,935.

Patented July 14, 1874.

Fig. 1.

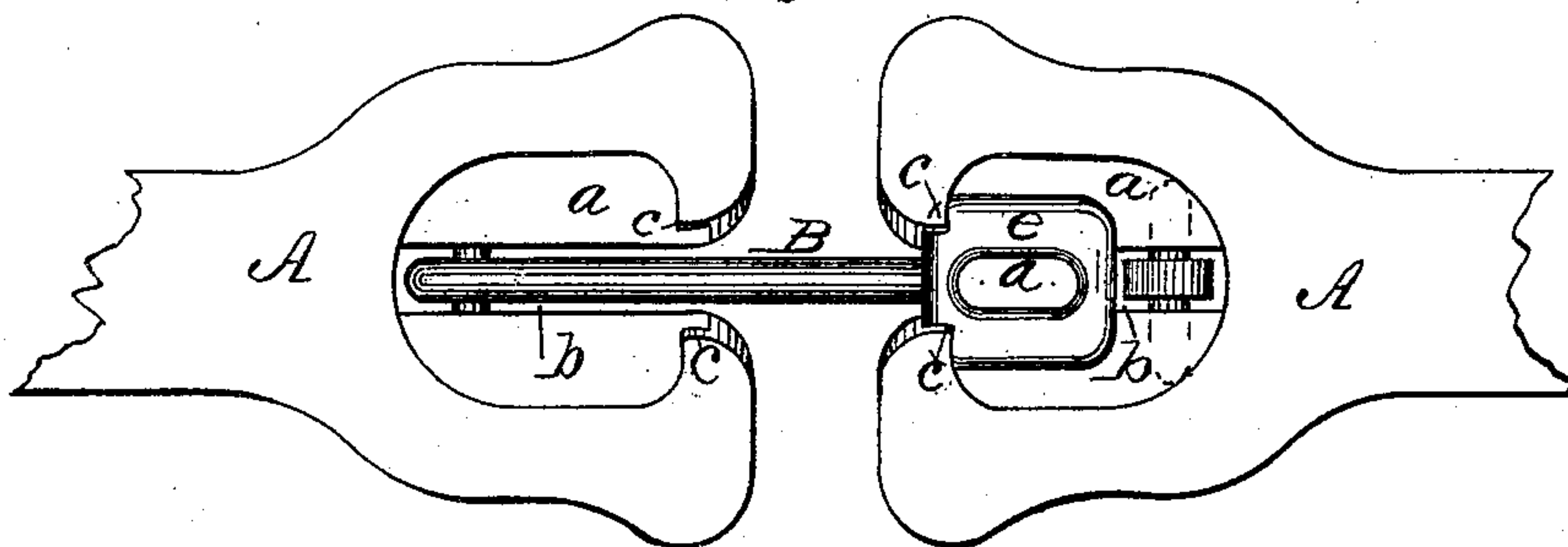


Fig. 2.

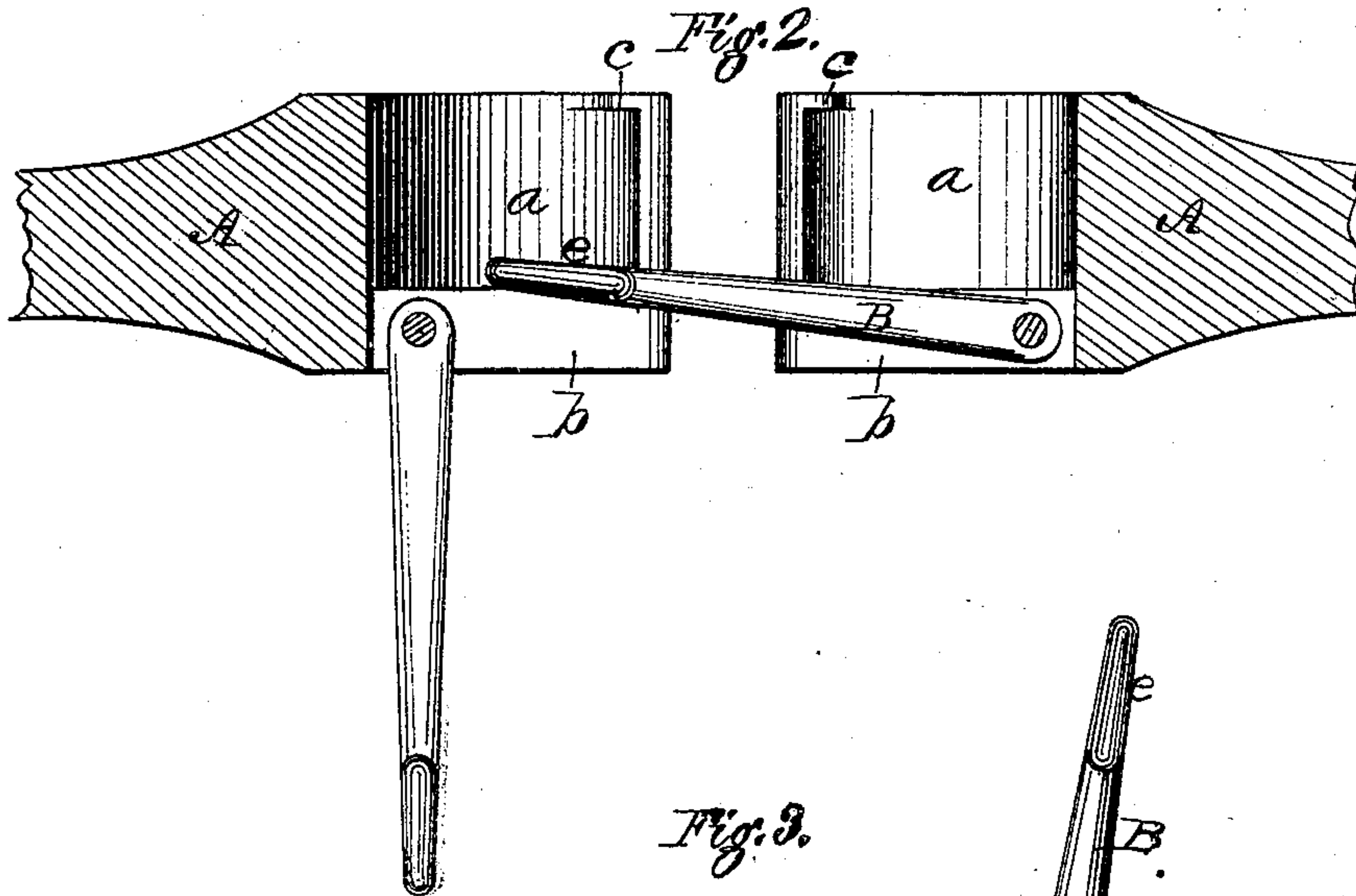


Fig. 3.

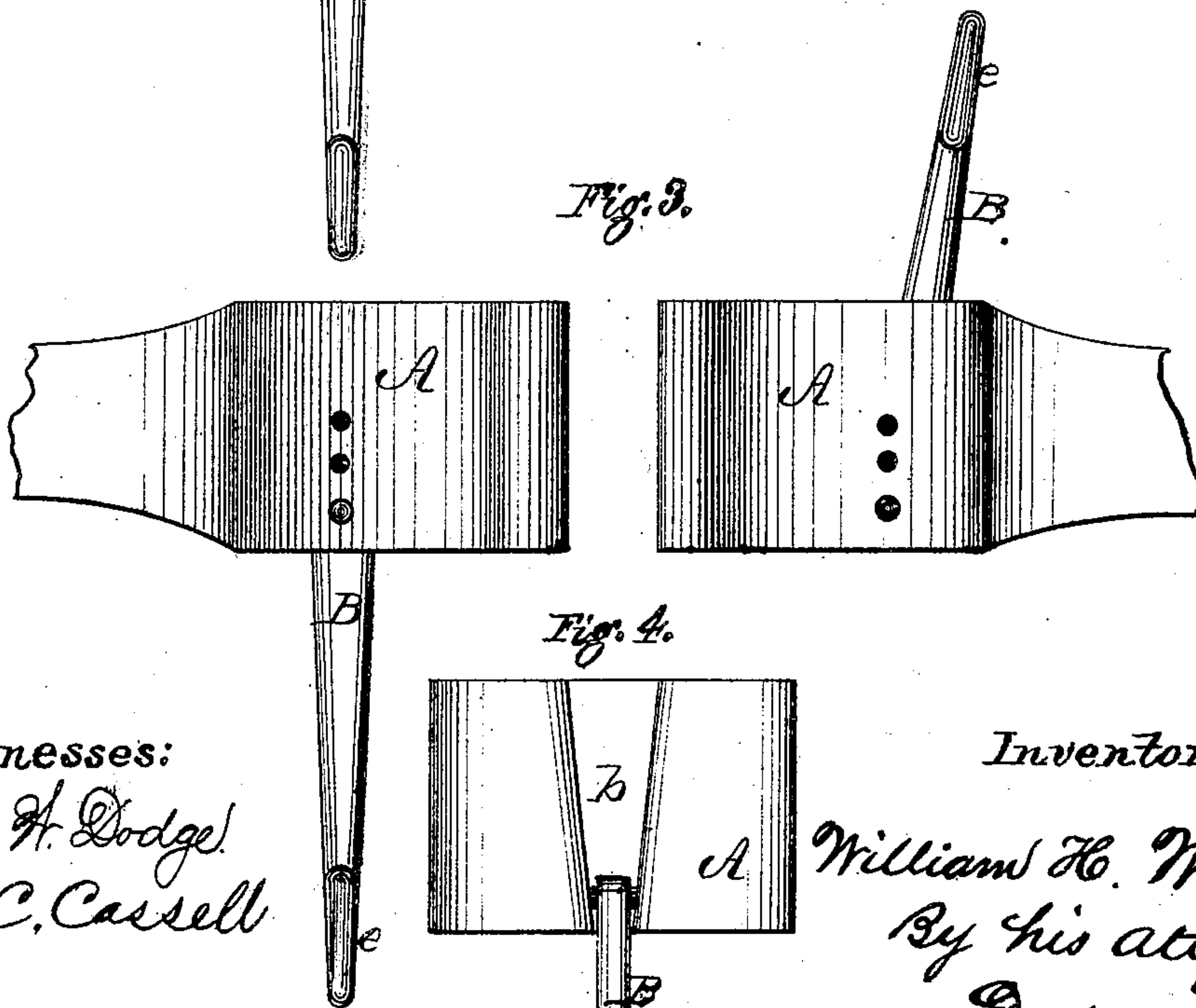
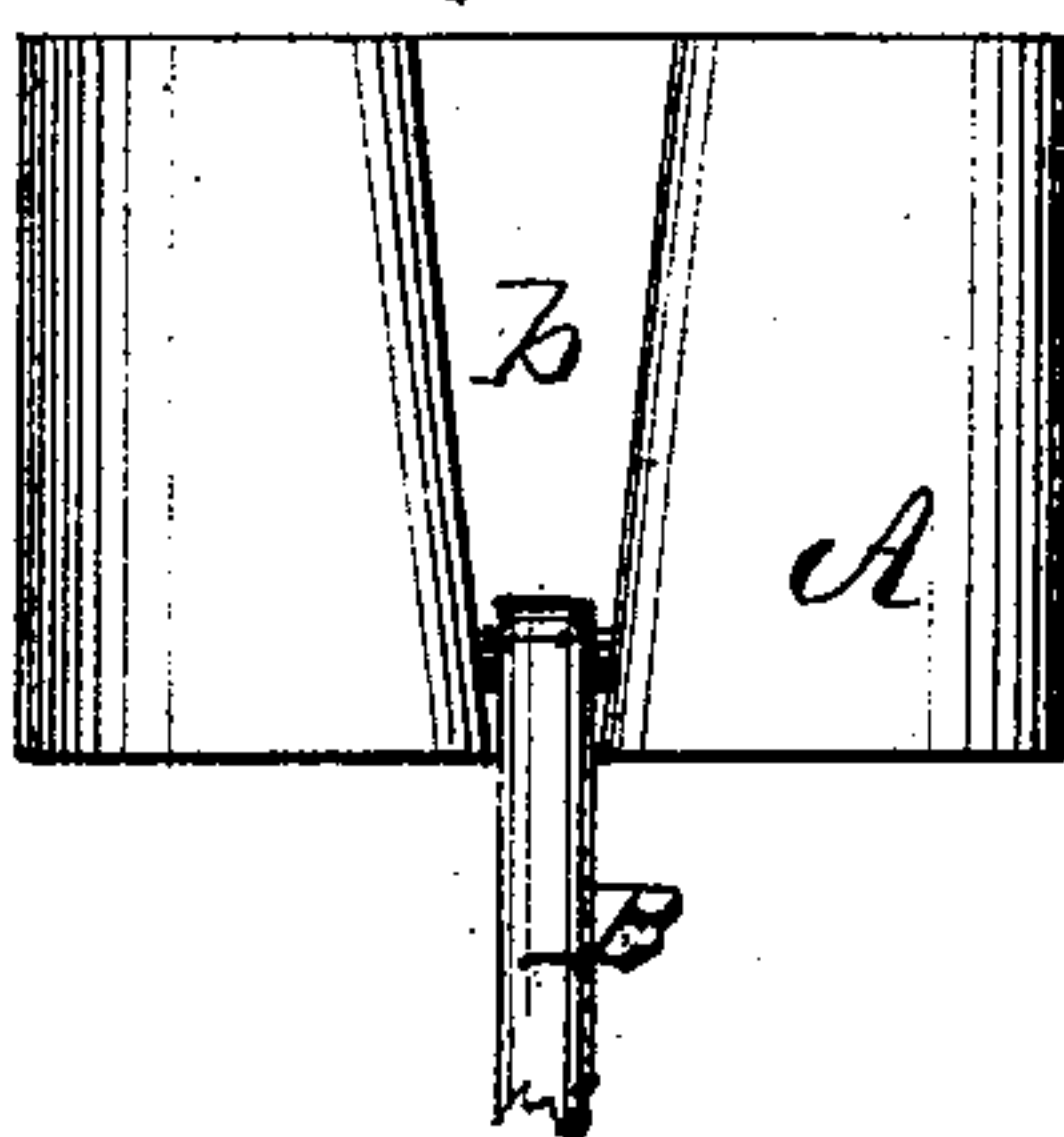


Fig. 4.



Witnesses:

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By his attys.

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UNITED STATES PATENT OFFICE.

WILLIAM H. WILSON, OF ROCK ISLAND, ILLINOIS, ASSIGNOR OF THREE-FOURTHS HIS RIGHT TO ELISHA P. REYNOLDS, THOMAS SAULPAUGH, AND WILLIAM H. MITCHELL, OF SAME PLACE.

IMPROVEMENT IN CAR-COUPPLINGS.

Specification forming part of Letters Patent No. **152,935**, dated July 14, 1874; application filed June 12, 1874.

To all whom it may concern:

Be it known that I, WILLIAM H. WILSON, of Rock Island, in the county of Rock Island and State of Illinois, have invented certain Improvements in a Self-Acting Car-Coupling, of which the following is a specification, reference being had to the accompanying drawings.

My invention consists in a peculiar construction and arrangement of recessed draw-heads, having pivoted draw bars or links, as hereinafter fully explained.

Figure 1 is a top-plan view of a pair of my draw-heads coupled together; Fig. 2, a longitudinal vertical section through the same; Fig. 3, a side view of the same uncoupled, and Fig. 4 an end or face view of one of the draw-heads.

A A represent the draw-heads, each made of cast-iron in one solid piece, with a large cavity or recess, *a*, in the upper side, as shown. A vertical slot or recess, *b*, is cut centrally through the front and bottom of the head into the cavity or recess, as shown in Figs. 1, 2, and 4. In the front of the head the slot or opening is widened toward the top, as shown in Fig. 4. At each side of the slot *b*, on the inside of the cavity *a*, and at the top of the same, I form a lip or flange, *c*, as shown in Figs. 1 and 2.

In the back end of each slot *b*, in the bottom of the draw-head, I pivot the rear end of a draw-bar or link, B, as clearly shown in all the figures. This draw-bar is made of such size that it can swing freely up and down through the slot *b*, and is provided at its outer end with a flat head, *e*, of such size and form that it will readily enter the cavity or recess in the other draw-heads, as shown in Figs. 1 and 2.

The parts are so arranged that the coupling bar or link may be turned upward and backward, so as to rest against the back of the recess *a* in nearly a vertical position, as shown on the right hand in Fig. 3; or, when desired, turned down and allowed to hang

below the head, as shown on the left in said figure.

When the cars are to be coupled, the link of one head is turned up and the other turned down, as shown in Fig. 3, and then the heads brought sharply together.

The concussion throws the upright link or draw-bar forward, and causes its flat head to drop into the recess or cavity in the other draw-head, as shown in Fig. 1. In this way the two heads are locked together, the flat end of the link or draw-bar engaging inside of the recess or cavity in such manner that it cannot be withdrawn, while at the same time there is sufficient play to admit of the cars running easily, and prevent the link or bar from cramping or breaking.

When the cars are in motion the lips will effectually prevent the end of the link or bar from slipping or jumping out of the recess; but when there is no strain on the link, and the heads are not drawn apart, the lips do not prevent the link from being uncoupled.

In case either car runs from the track, or tips up on its side, the flat end of the link or bar will be released and the cars disconnected.

In order that cars of differing heights may be readily coupled, I make the draw-head with several holes for the pivot of the link or bar, one above another, as shown in Fig. 3, so the pivot may be inserted in one or another, according to the height at which it is desired to use it.

In order to provide for coupling my head to those in common use, having a link and pin, I provide the flat end of the link or bar with a hole or opening, as shown, so that it may be inserted into the common draw-head and fastened by the pin.

By widening the upper part of the slot *b*, as shown in Fig. 4, the falling link is caused to enter readily and with certainty, while by contracting the lower part too much play is prevented.

My coupling is extremely cheap, strong, and simple, is reliable in operation, and is without danger in case of accident.

Having thus described my invention, what I claim is—

1. The draw-head A, provided with the cavity *a*, slot *b*, and pivoted link B, having the flat head *e*, as shown and described.

2. In combination with a link or draw-bar, B, having a flat head, *e*, a draw-head, A, having a cavity, *a*, slot *b*, and lips *c*, as set forth.

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Witnesses:

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