

(No Model.)

A. N. TOWNE.

CAR COUPLING.

No. 353,519.

Patented Nov. 30, 1886.

Fig. 1.

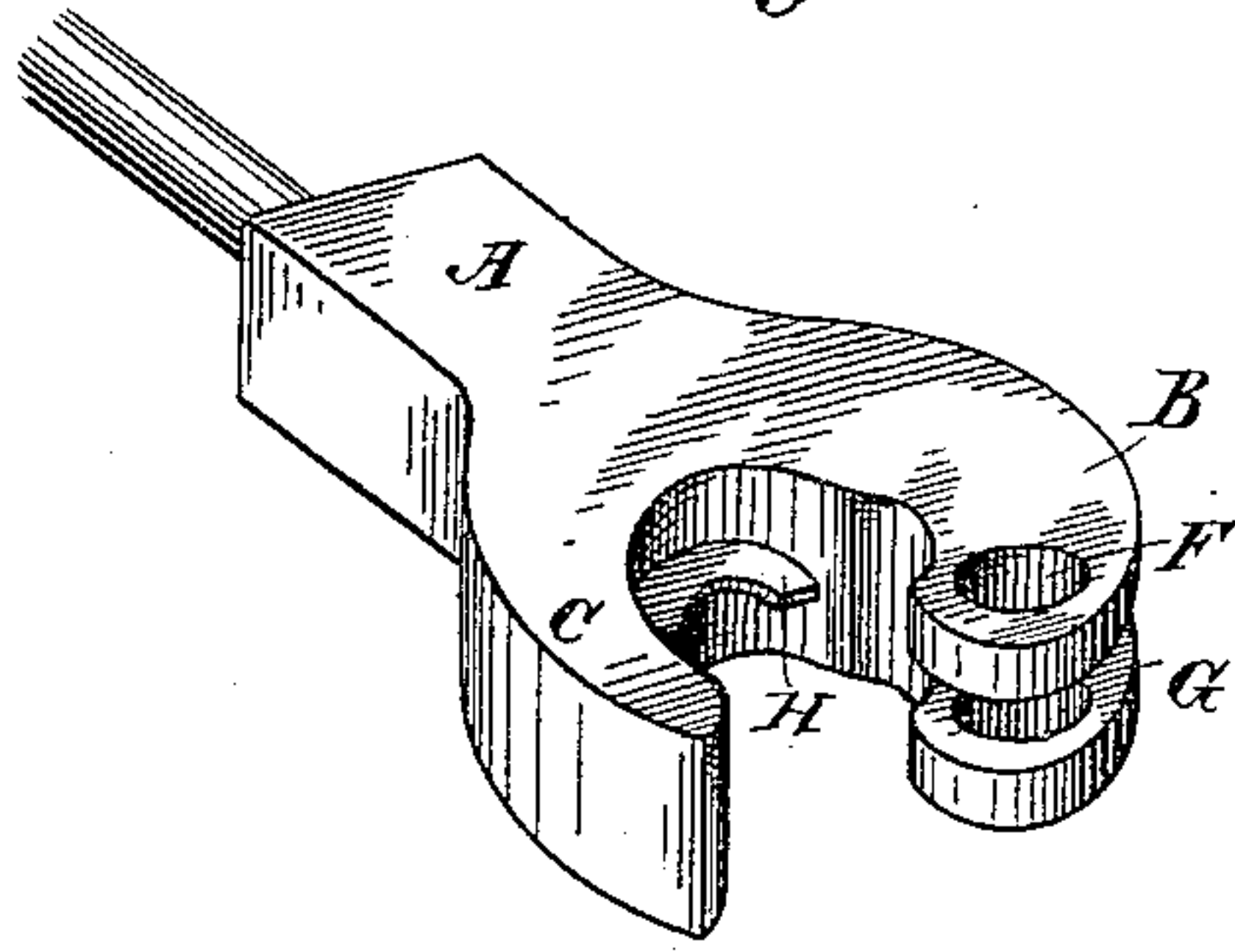


Fig. 2.

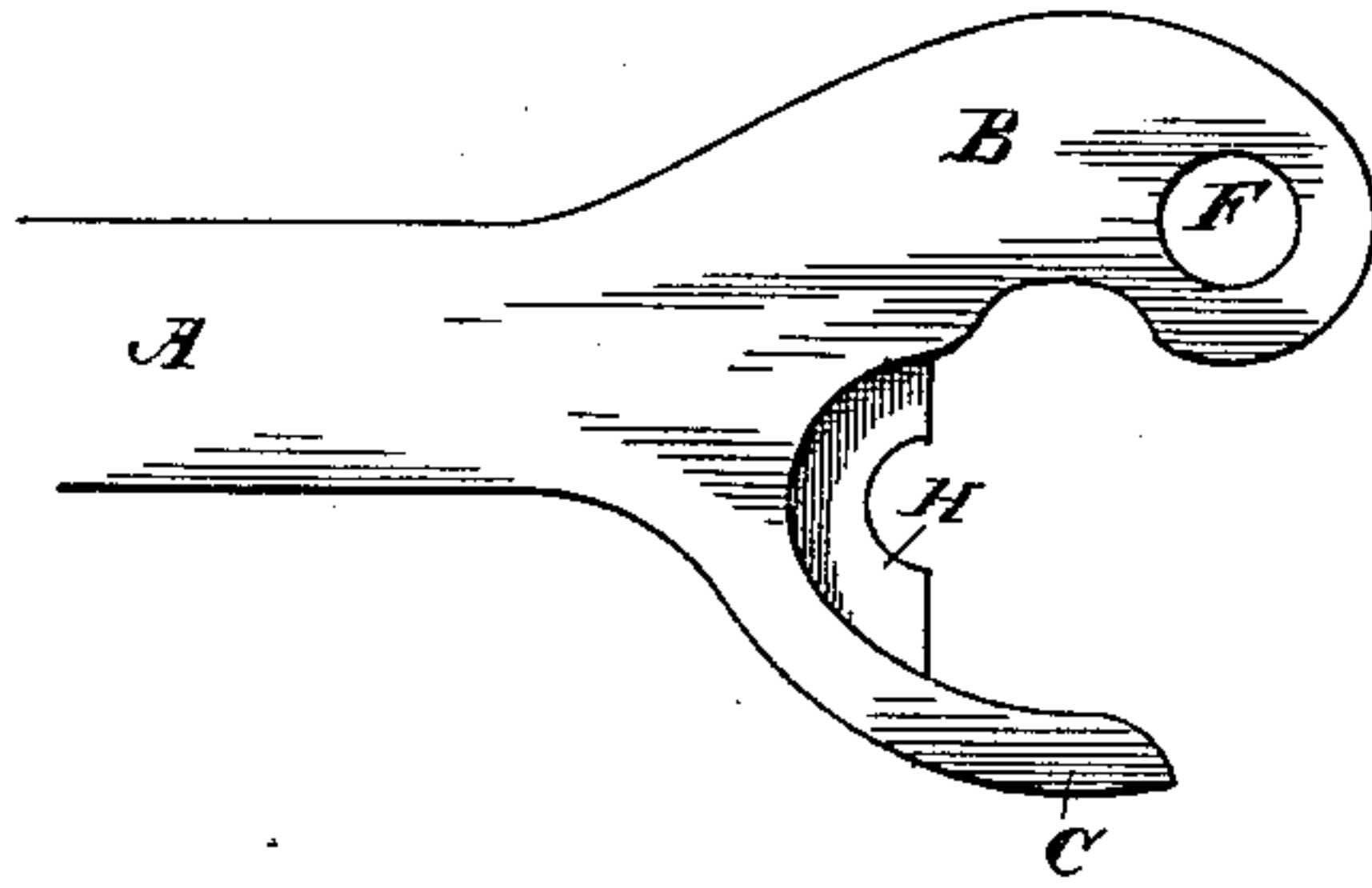
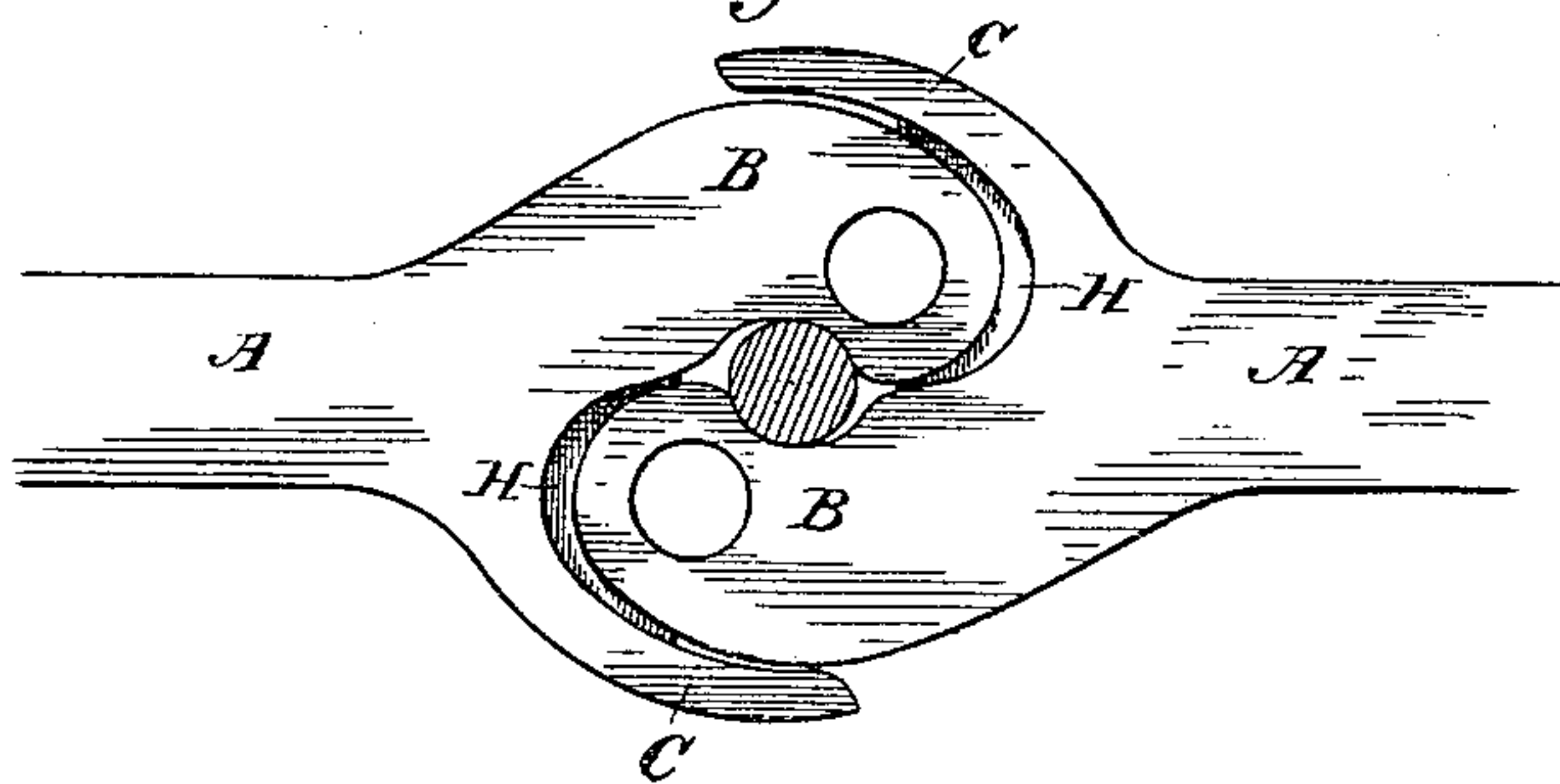


Fig. 3.



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UNITED STATES PATENT OFFICE.

ALBAN N. TOWNE, OF SAN FRANCISCO, CALIFORNIA.

CAR-COUPLING.

SPECIFICATION forming part of Letters Patent No. 353,519, dated November 30, 1886.

Application filed August 25, 1886. Serial No. 211,850. (No model.)

To all whom it may concern:

Be it known that I, ALBAN N. TOWNE, of the city and county of San Francisco, State of California, have invented an Improvement in Car-Couplers; and I hereby declare the following to be a full, clear, and exact description of the same.

My invention relates to a device for coupling or connecting cars.

10 It consists of peculiarly-formed draw-heads adapted to interlock with each other when the cars come together, and having a pin-opening made between their central adjacent meeting sides, one-half the opening lying within each
15 of the heads, so that when the pin is introduced it will hold them together, and, in combination with this, a plate or mechanism by which the two heads are prevented from separating by reason of too great a vertical movement of
20 one of the cars which they connect.

Referring to the accompanying drawings for a more complete explanation of my invention, Figure 1 is a perspective view of one of the heads, showing this preventer-plate. Fig.
25 2 is a plan view of the same. Fig. 3 is a view showing the two heads engaged.

A A are draw-bars, having heads formed, as shown at B, so as to interlock or pass each other when cars come together that have these
30 bars attached to them. The head B is formed upon one side of a central line of the draw-bar, and upon the opposite side is an extension or wing, C, which forms, with the part B, a chamber or depression open at the front, and of
35 sufficient size to admit the head B of the opposite draw-bar, while at the same time its own head enters a corresponding space in the other bar. These chambers or depressions have vertical sides, and the two inner or adjacent faces B have vertical semi-cylindrical
40 holes made in them, so that when the heads are brought together the semi-cylindrical holes will stand opposite each other, and together form a hole into which a pin may be dropped,
45 which will remain in place and prevent the heads from being drawn apart.

The extending wings or resistance-guides C prevent the heads B from separating laterally and becoming released from the pin. As the
50 chambers and heads have vertical sides, it will be manifest that any amount of vertical movement would be allowed between the two coupling-heads without some device for preventing

the same, and in some cases, where the cars are of unequal height, or in passing over irregular
55 road-beds or from a track upon the mainland to one upon a ferry-boat, or under certain other similar conditions, the cars might become uncoupled when it was not desired to have them do so. In order to prevent this, I form
60 a plate or diaphragm, H, at the rear of each of the chambers in the draw-head, as shown. Each of the heads B has a horizontal slot, G, made in it, so that if these couplers are brought
65 into contact with the ordinary couplers a link may pass into this slot and be held by a pin passing through the vertical hole F, made through the end of the head B.

When two of these couplers having the plates or diaphragms H are brought together, each
70 of the plates H will enter the slot G of the opposite head, and it will be manifest that when the coupling-pin is in place between the two heads it will prevent their being drawn apart, and these plates or diaphragms will prevent so
75 great a vertical movement of the couplings as would separate them.

Having thus described my invention, what I claim as new, and desire to secure by Letters Patent, is—

80 1. The draw-bars having heads which pass each other upon the opposite sides of a vertical longitudinal plane, with curved extensions or resistance-guides from each bar, which pass outside of the head of the opposite bar, and a pin
85 hole or opening one-half of which is formed in each of the meeting faces of the heads, to receive a coupling-pin, in combination with horizontal plates formed at the rear of the recesses of the heads, substantially as herein de-
90 scribed.

2. The draw-bars having the coupling-heads adapted to enter corresponding open chambers in the opposite heads, and having horizontal slots made in their ends, as shown, in combination with the horizontal plates or diaphragms,
95 extending across the rear of the chambers, into which the heads are received, so as to enter the slots, substantially as herein described.

In witness whereof I have hereunto set my
100 hand.

ALBAN N. TOWNE.

Witnesses:

S. H. NOURSE,
H. C. LEE.