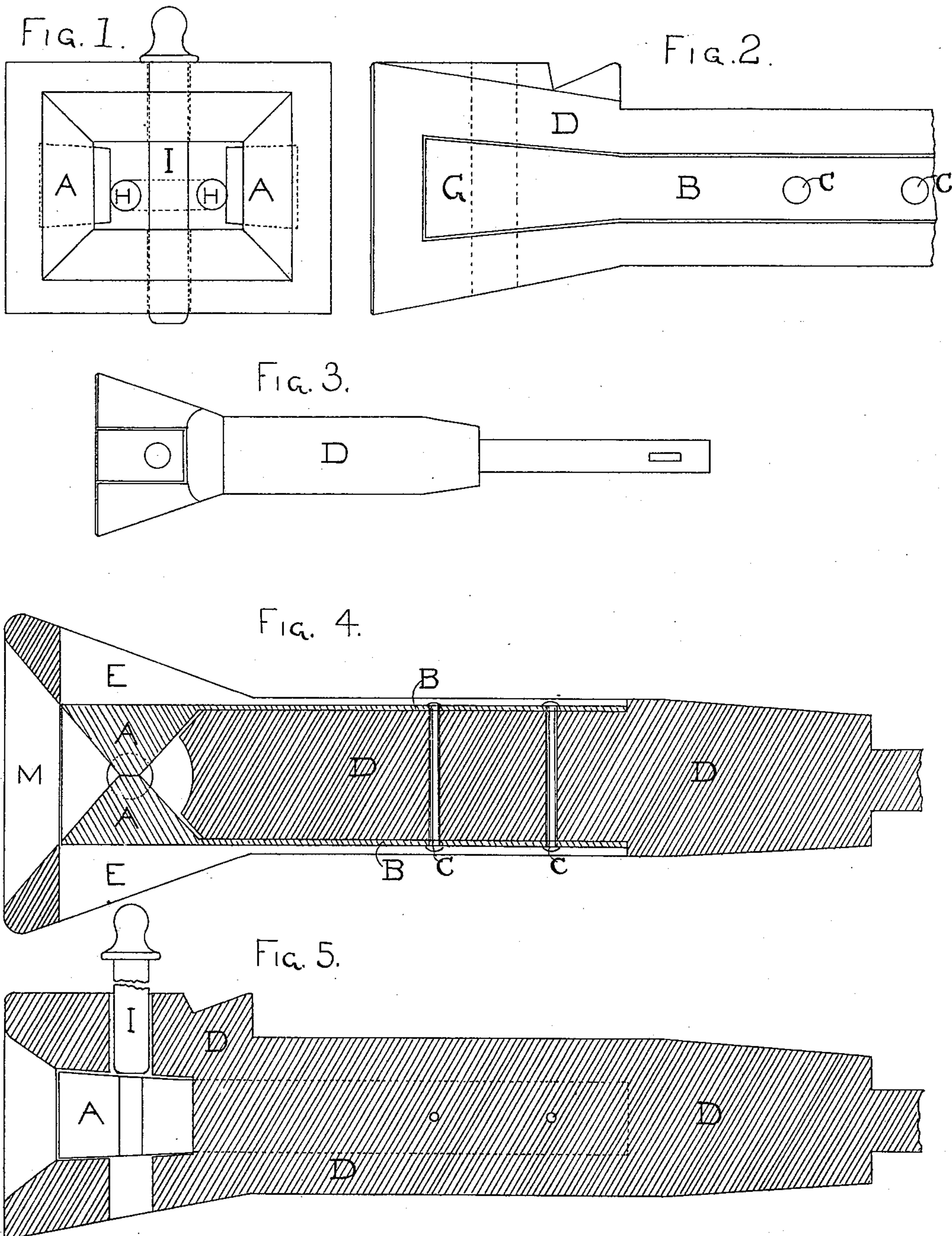


(No Model.)

J. WHITMORE.
CAR COUPLING.

No. 329,794.

Patented Nov. 3, 1885.



WITNESSES.

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JOHN WHITMORE, OF SALEM, MASSACHUSETTS.

CAR-COUPLING.

SPECIFICATION forming part of Letters Patent No. 329,794, dated November 3, 1885.

Application filed March 16, 1885. Serial No. 159,057. (No model.)

To all whom it may concern:

Be it known that I, JOHN WHITMORE, a citizen of the United States, residing in Salem, a city in the county of Essex and State of Massachusetts, have invented an Improvement in Car-Couplers Designed to Work Automatically, and called "The Whitmore Automatic Car-Coupler," of which the following is a specification, reference being had to the drawings hereto annexed.

My invention relates to that class of automatic car-couplings in which the coupling-pin when not in use is supported by spring-jaws that are adapted to be opened or spread apart by the entering link, so as to cause the pin to drop into engagement with said link, thereby coupling the opposite draw-bars, without any necessity of going between the cars, either to drop the pin or hold the link. Heretofore in couplings of this class the spring-jaws have been provided with longitudinal V-shaped grooves to receive and hold the link in a horizontal position; but the V-shaped grooves are liable to interfere with the necessary vertical inclination of the link in coupling cars that differ materially in height. To overcome this difficulty, and provide as well for guiding the link into place, and also for its vertical inclination in coupling cars of different heights and its necessary lateral inclination and play while the cars are in motion, I make the pin-supporting jaws wedge-shaped and with continuous vertical surfaces at their meeting edges without grooves or recesses. By this means a wedge-shaped opening is presented toward the mouth of the draw-head, whereby the link is surely guided to its place without regard to varying elevations of the draw-bars. The continuous vertical meeting edges of the jaws permit the link to have any required vertical inclination, and the spaces at front and rear of the wedge-shaped jaws allow the necessary lateral inclination or play of the link in turning curves.

In the annexed drawings, illustrating my invention, Figure 1 is an end view of my improved car-coupler. Fig. 2 is a side view of the draw-bar. Fig. 3 is a plan of the same. Fig. 4 is a horizontal longitudinal section. Fig. 5 is a vertical longitudinal section of the draw-bar, showing the coupling-pin supported by the spring-jaws.

The draw-bar D is made with a flaring

mouth, M, as usual, and is cored on each side at E E, to admit of the lateral yielding movement of the wedge-shaped jaws A A, which are formed on or attached to spring-arms B B, that are secured to the sides of the draw-bar by means of bolts or rivets C C, or otherwise. The jaws A and springs B are preferably made of steel. It will be seen that the two opposite wedge-shaped jaws A A are so arranged that the force of the springs B B will keep the edges of said wedge-shaped jaws in contact, thus forming a support for the coupling-pin I until the entrance of the link H spreads the jaws apart, thereby causing the coupling-pin to fall into engagement with the link, as shown in Fig. 1. The vertical meeting edges of the wedge-shaped jaws are formed without grooves or recesses of any kind, and in such a manner that the jaws will be in contact with each other throughout the length of said edges when the link is withdrawn. These continuously-vertical meeting edges of the yielding jaws A enable the link H to assume and maintain any required vertical inclination, to accommodate itself to inequalities in the height of the opposing draw-bars. It will also be observed that the wedge-shaped spaces in the draw-bar at front and rear of the wedge-shaped jaws permit the link to turn freely in a horizontal direction between the yielding jaws to any required inclination in turning curves, while the wedge-shaped space or opening in front of said jaws insures a proper guiding of the link into place when the draw-bars are brought together in the act of coupling.

What I claim as my invention is—

The combination, with the draw-bar D, of the yielding wedge-shaped jaws A A, attached to the draw-bar by spring-arms B B, and having continuous vertical meeting edges, whereby said jaws are adapted to support the coupling-pin when not in use and permit the engaged link to have both a vertical and horizontal inclination, substantially as described.

In testimony whereof I have signed my name to this specification, in the presence of two subscribing witnesses, this 12th day of March, in the year of our Lord, 1885.

JOHN WHITMORE.

Witnesses:

GEO. D. PHIPPEN,
WM. S. HARRIS.