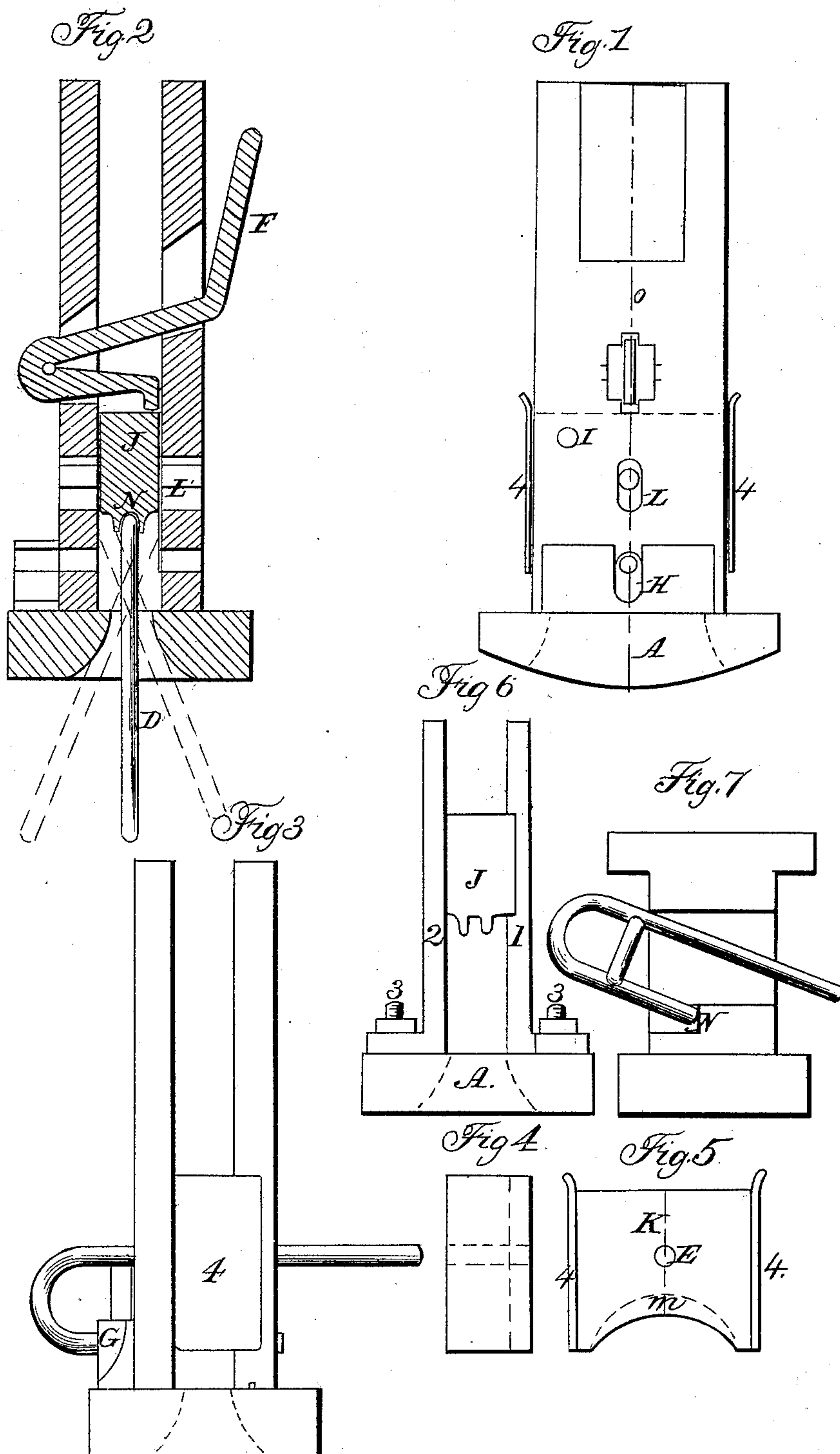


G. S. BISHOP.

Car Coupling.

Patented Oct. 12, 1858.

No. 21,737.



# UNITED STATES PATENT OFFICE.

GEO. S. BISHOP, OF WASHINGTON, DISTRICT OF COLUMBIA.

## CAR-COUPLING.

Specification of Letters Patent No. 21,737, dated October 12, 1858.

*To all whom it may concern:*

Be it known that I, GEORGE S. BISHOP, of Washington, District of Columbia, have invented a new and Improved Mode of Constructing Car-Couplers; and I do hereby declare that the following is a full and exact description thereof, reference being had to the accompanying drawings and to the letters of reference marked thereon.

The nature of my invention relates to the constructing the bumper head and pin in such a manner that the coupling will be automatic and allowing the link to be set at different inclinations to accommodate different height cars.

To enable others skilled in the art to make and use my invention, I will proceed to describe its construction and operation.

I construct the bumper head in any of the known forms.

A, represents the bumper head; B, the pin; D, the link.

Figure 1 shows the top of bumper head, Fig. 2 a section through the red line o, and, Fig. 3, shows a side view of the same.

The letters of reference on the several figures refer to the same parts.

E, Fig. 1, a hole through the slide block. This block serves to guide the link in coupling, and to hold it in poise or an inclination for high or low cars, and by the lever F, Fig. 2, is moved forward, making it automatic at pleasure the long arm of the pin passes through and remains in the block and when in action keeps the block from chafing the link or pin, as the pin B, is raised and the short arm, is brought to the top of the block at G, the pin and block together are moved forward and come in contact with the block or stop G, and letting the pin drop it rests in the slot H, Fig. 1, and is in position for coupling. If it is desired to have the pin and block both out of work, the pin is raised so as to relieve the short arm from its position at H, and carrying it around to I, at the same time slipping the block with it; it becomes stationary, and prevents any coupling taking place even if the cars are run together. Fig. 4, shows a side view of the block, J. Fig. 2, is a section of the block E, through the red line K. The slots L, L', in the bumper head are made a little longer than the distance which the block moves, which will be equal to about twice and a half diameters of the coupling pin or loop bolt B.

The dotted line in Fig. 5 represents the grooves cut in the end of the slide block, for elevating the link to suit different height cars. The form is fully represented at N Fig. 2.

The main feature in this coupler is its simplicity and surety of action, and no possible chance for any wear other than the ordinary wear on the link and pin, and its adaptiveness to the old wrought bar coupler as well as the cast heads.

In case it is desired to use this loop pin or bolt all the change that will be required in the common cast head will be to make the slots L, and H, Fig. 1, and the hole I, or a place for the pin to rest in when out of work, and to fit it to the wrought bar coupler. The same slots require to be made, and the block Fig. 5 with its flanges 4, 4, 4, 4, Figs. 1 and 5. These flanges may be cast on the block, Fig. 5, if it is desired to use cast heads on wrought bars, as Fig. 6, in which A is a cast head and 1, 2, the wrought bars secured to the head by the bolts 3, 3, J representing the slide block.

In case I wish to use the loop bolt, without the block Fig. 5, I connect the slots H and L, Fig. 1, as shown in Fig. 7, and allow the bolt to ride or rest on the link, while the cars are coupled together, but prefer to use the block with the bolt passing through it and allowing it (the bolt) to rest on the space between the two slots as in Fig. 1.

Having thus fully described my improved coupling and slide block as applicable to wrought or cast bumper heads, what I claim as new and desire to secure by Letters Patent is—

I claim—

1. The loop bolt or pin B, in combination with the slots H, and L, Fig. 1, and slide block Fig. 5, with grooves as described.

2. I claim the manner of supporting the loop bolt, by allowing the short arm to rest on the bumper head as N, Fig. 7, instead of resting on a block or ball, whether the slots H and L Fig. 1, be separated or connected as in Fig. 7, when constructed and operated in the manner set forth.

GEORGE S. BISHOP.

Witnesses:

J. H. MERRILL,  
JOHN A. FOOS.