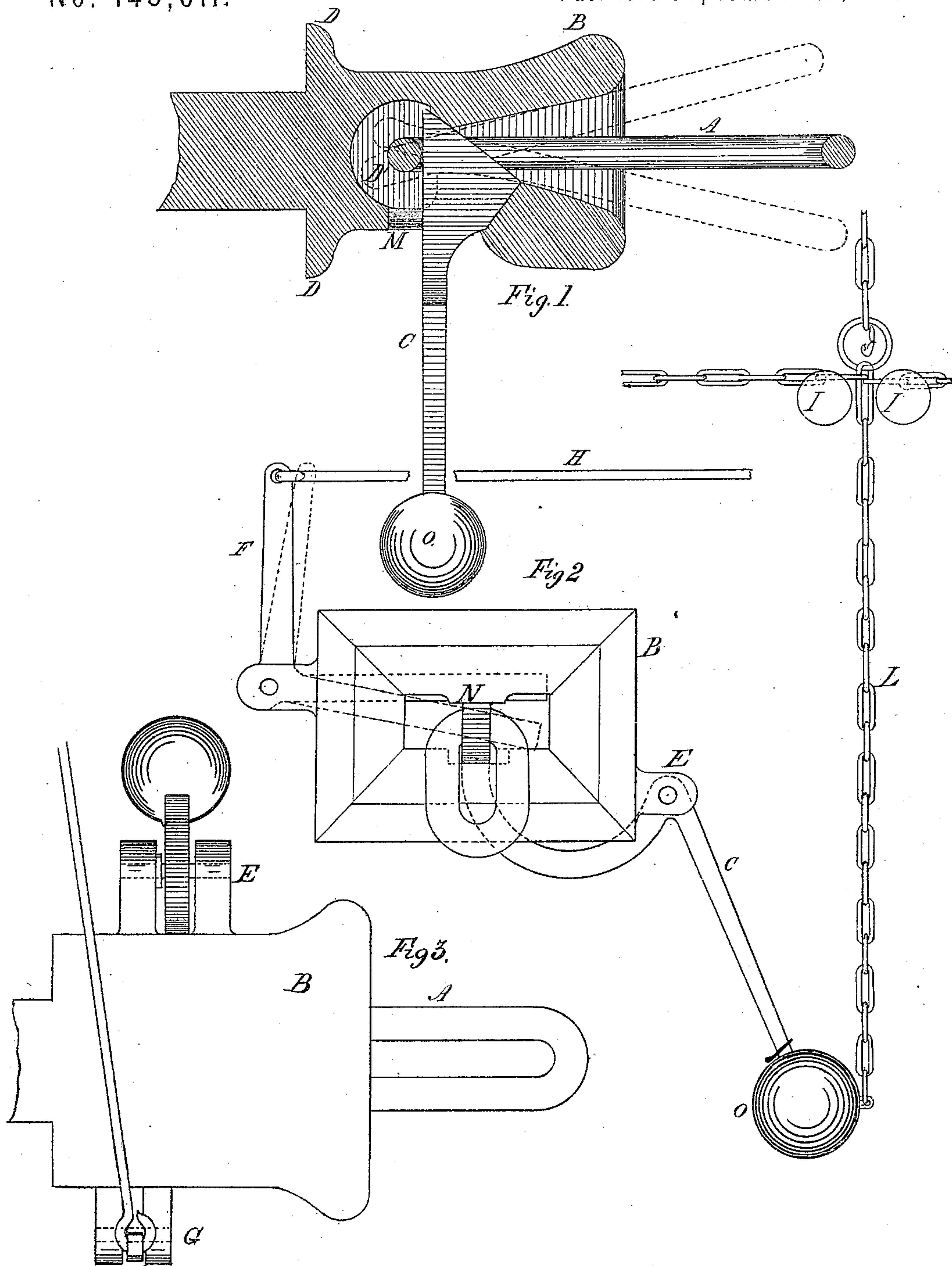


J. F. L. HOLMAN.

Car-Couplings.

No. 143,011.

Patented September 23, 1873.



Wm. Bruce
W. B. Bruce

John F. L. Holman

UNITED STATES PATENT OFFICE.

JOHN F. L. HOLMAN, OF HAMILTON, CANADA, ASSIGNOR OF ONE-HALF
HIS RIGHT TO EDWIN HENWOOD, OF SAME PLACE.

IMPROVEMENT IN CAR-COUPPLINGS.

Specification forming part of Letters Patent No. **143,011**, dated September 23, 1873; application filed
March 14, 1873.

To all whom it may concern:

Be it known that I, JOHN FREDERICK LINDRIDGE HOLMAN, of the city of Hamilton, in the county of Wentworth, in the Province of Ontario, Dominion of Canada, have invented certain new and useful Improvements in Car-Couplings; and I do hereby declare that the following is a full, clear, and exact description of the construction and operation of the same.

The object of the invention is the construction of a car-coupler that is automatic in its action, simple, thoroughly effective, and so arranged as to obviate the necessity of a man going between the cars for the purpose of coupling and uncoupling them.

Figure 1 is a longitudinal section of a bumper-head and link. Fig. 2 is a front view of the same. Fig. 3 is a top view.

B, Fig. 1, is the bumper-head, provided with a recess, D', as shown. On the right side of the bumper are lugs E, upon which is pivoted a curved tooth or pin, C, which passes through an opening, M, in the bottom of the bumper-head, as shown; its upper portion comes in contact with a projection, N, at the rear of the mouth of the bumper. The right side of the said tooth C is of a triangular form. One side of the angle is so inclined as to enable the link to glide over it and catch, when the lower angle comes in contact with the beveled side of the opening M, forming a lock so firm that it is impossible for the link A to escape. The lower portion of the tooth or pin C is provided with a balance ball or weight, which presses the top of the said pin C upward against a projection, N, and the link cannot work loose until the balance-weight is raised. It will be seen that a chain, L, is attached to the ball O, and passes upward to pulleys I I; from thence it may be made to branch to each side of a car, and also to the top of it, so as to enable a man to uncouple cars from either side, as well as from the top, as may be found convenient. The chain is provided with a large link, J, above the said pulleys I I, to prevent it from slipping down between them. The pulleys will be protected by an ordinary

guard. Cars are constructed of different heights, and in order to adapt the link to such I provide a device for raising and guiding the link. It consists of a bell-crank, F, pivoted to the lugs G on the left side of the bumper, as shown in Fig. 2; the horizontal portion of the crank inside the bumper is represented by dotted lines. A rod, H, passes from the top of said crank, and its opposite end is secured to any convenient part of a car. When it is desired to raise the outside end of a link the rod H is drawn, which depresses the lower arm of the crank downward against the inner end of the link into the bottom of the recess D', by which the outer end of the link is elevated and guided into an opposite bumper without the necessity of a man endangering his life by going between the cars to guide the link with his hand. The dotted lines in Fig. 1 show how much play the link has in the bumper, and the dotted lines in the center of Fig. 2 shows the action of the bell-crank.

Cars can be coupled and uncoupled from either side as well as from the top of a car without danger.

The ordinary link is used, so that any car not having my device attached can be coupled to a car with the device by a link and pin in the ordinary way.

Frost does not act upon it; neither is it liable to be fractured.

What I claim as my invention is—

1. In combination with the bumper-head B, the weighted tooth or pin C, pivoted between the lugs E, for operation, in respect to the link of a car-coupling, substantially as herein set forth.

2. In combination with the weighted tooth or pin C and bumper-head, the chain L, pulleys I I, and link-guide F, to operate substantially as described.

Dated at Hamilton, Canada, this 11th day of March, 1873.

JOHN F. L. HOLMAN.

Signed in the presence of—

WM. BRUCE,
W. B. BRUCE.