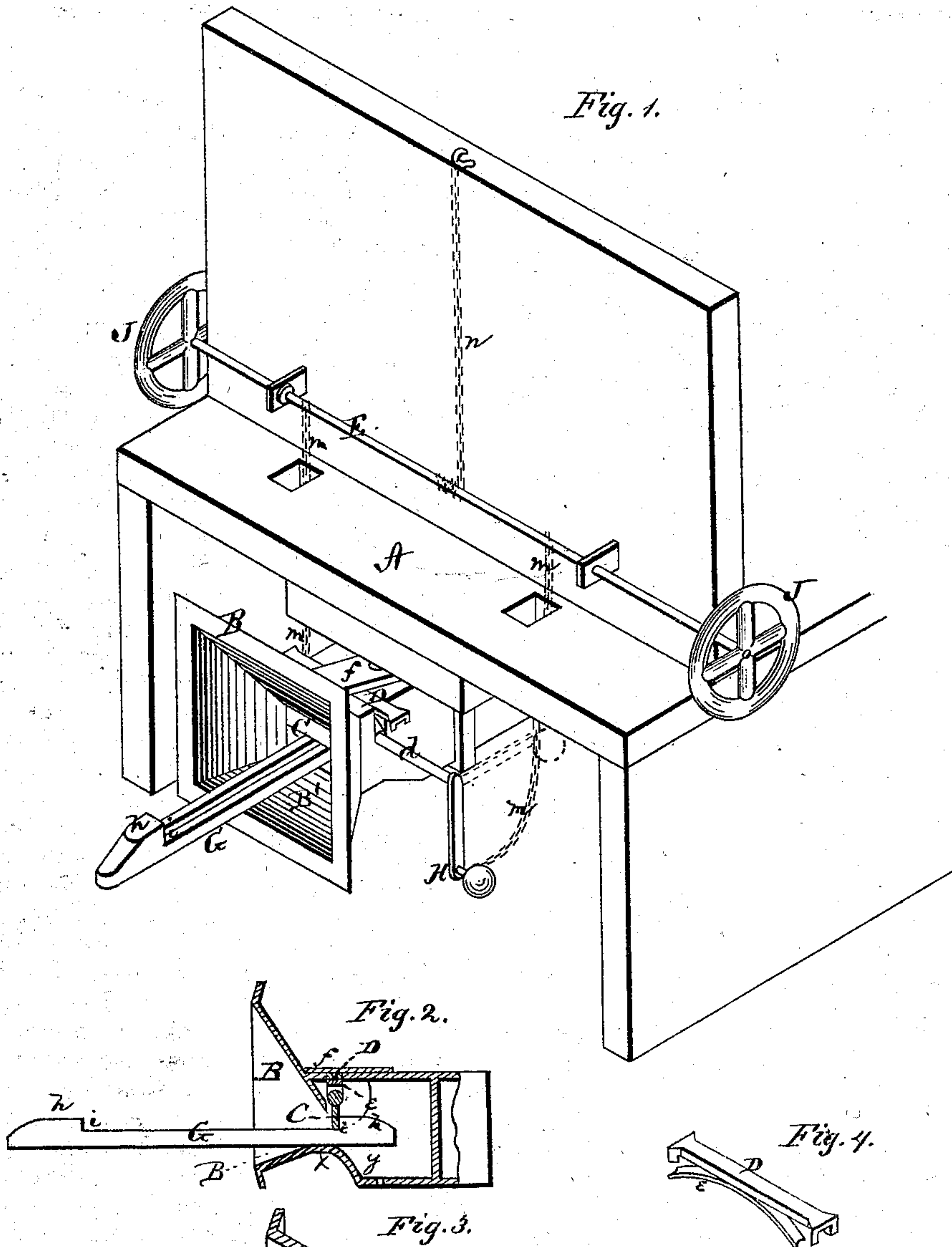


L. B. WILSON.

Car-Couplings.

No. 135,871.

Patented Feb. 11, 1873.



Witness:

Henry N. Miller  
Le. L. Evert.

Inventor.

Lester B. Wilson  
per Alexander M. Mason

Attorneys.



# UNITED STATES PATENT OFFICE.

LISTON B. WILSON, OF CALDWELL, ASSIGNOR TO ISAAC A. WILSON, OF  
ZANESVILLE, OHIO.

## IMPROVEMENT IN CAR-COUPPLINGS.

Specification forming part of Letters Patent No. 135,871, dated February 11, 1873.

*To all whom it may concern:*

Be it known that I, LISTON B. WILSON, of Caldwell, in the county of Noble and in the State of Ohio, have invented certain new and useful Improvements in Car-Couplings; and do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawing and to the letters of reference marked thereon making a part of this specification.

The nature of my invention consists in certain improvements upon the car-coupling for which Letters Patent were granted to me November 26, 1872, as will be hereinafter more fully set forth.

In order to enable others skilled in the art to which my invention appertains to make and use the same, I will now proceed to describe its construction and operation, referring to the annexed drawing, in which—

Figure 1 is a perspective view, showing the end of a car with my car-coupling attached thereto. Fig. 2 is a longitudinal vertical section of the draw-head. Fig. 3 is a horizontal section of the same, and Fig. 4 is a perspective view of the movable bar in the top of the draw-head.

A represents the platform of a railroad car, in or under which is the draw-head B. The interior of this draw-head is constructed, as shown in Figs. 2 and 3, with vertical convex walls *a a* on the sides, and a concave back, *b*. Across the top of the draw-head is a slot extending downward in the sides of the head to receive a shaft, *d*, to which is attached a wing, *c*, and above the same, in the slot of the draw-head, is placed a bar, D, with spring *e* on its under side, the bar being held in place by a button, *f*, the same as described in my former patent above referred to. The ends of the bar D extend beyond the sides of the draw-head, and have downward-projecting flanges on its ends, as shown in Fig. 4. The object of the spring *e* is to hold the shaft and wing down, and yet at the same time allow them to play upward when needed. By the present construction of the bar D the strain on the spring *e* will, after the shaft *a* has risen a certain distance, be taken up by the ends of the bar, and hence any liability

to breaking the same entirely obviated. G represents the coupling-bar provided at each end with a beveled point or head, *h*, forming shoulder *i*, against which the wing C works to couple the cars. The entire bar G between the heads or points *h h* is slotted longitudinally, so that it can be used in place of the ordinary link, or when a car with my coupling should be used with a car having the common link-and-pin coupling. The lower face B' of the draw-head is inclined downward at its front from the bearing-point *x*, and is also inclined downward sharply from the rear of this bearing-point, so that when the link is in the head, with one of its enlargements in the rear of the gate C, it rests upon the point *x*. Should the bumper and coupler of one of the adjoining cars be higher than the other the link-head will fall down into the recess *y* in the bumper in rear of the point *x*, and the connection be as effectually made as in ordinary couplings. In couplings where no bearing-point *x* and recess *y* are used the coupling could not be so readily made where one car is higher than the other without a change in the form of the link, as the bottom of the coupling would be flat and allow no play for the head of the link.

The shaft *d*, to which the wing C is attached, is at each end provided with a crank, H, weighted on its outer end; and the outer end of each crank is, by a chain, *m*, connected with a shaft, E, placed horizontally in suitable bearings across the end of the car. Around the center of this shaft is wound another chain, *n*, which passes up to the top of the car. By pulling the chain *n* from the top it revolves the shaft E, winding up the chains *m m*, and raising the cranks H H, thereby also raising the wing C and uncoupling the cars. The cranks then fall down again by the weights on their ends unwinding the chains *m m* and winding up the chain *n*. On each end of the shaft E is a hand-wheel, J, for uncoupling from either side of the car.

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

1. The bar D, as constructed, being made

longer than the spring *e*, and used in combination with the shaft *d*, as and for the purpose set forth.

2. The combination of the draw-head B B' with convex inner walls *a a*, bearing-point *x*, recess *y*, and concaved back *b*, with the sliding spring-gate C, and link G, all substantially as set forth.

In testimony that I claim the foregoing I hereunto set my hand this 19th day of November, 1872.

L. B. WILSON.

Witnesses:

C. L. EVERT,  
EDM. F. BROWN.