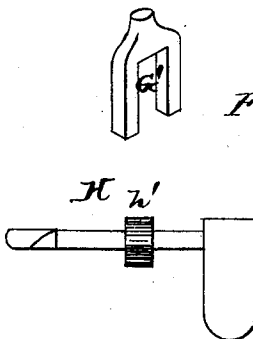
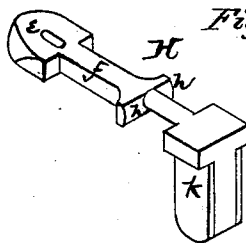
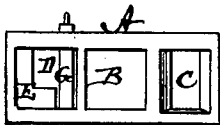
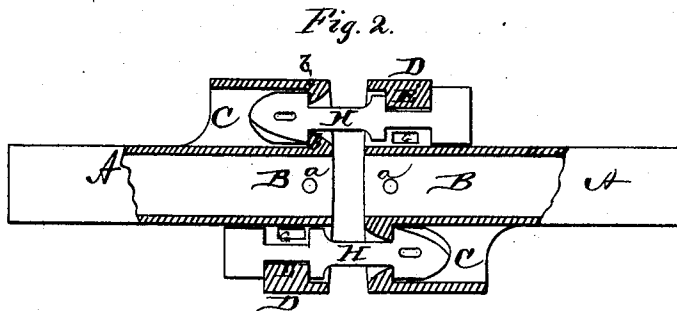
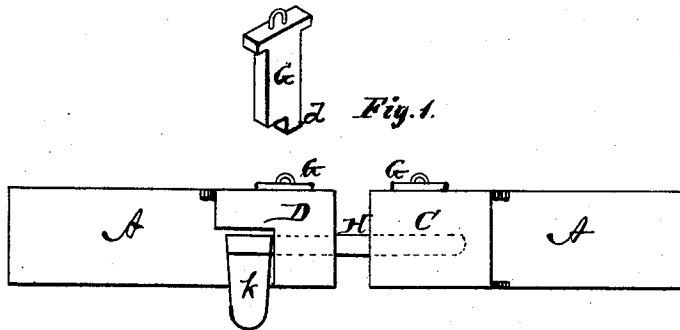


A. A. AMES.

Improvement in Car-Couplings.

No. 132,042.

Patented Oct. 8, 1872.



Witnesses:

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C. L. Ewer

Inventor.

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UNITED STATES PATENT OFFICE.

ALBERT A. AMES, OF MINNEAPOLIS, MINNESOTA, ASSIGNOR TO HIMSELF,
JOSEPH W. BATES, AND MATTHEW BUXTON, OF SAME PLACE.

IMPROVEMENT IN CAR-COUPPLINGS.

Specification forming part of Letters Patent No. 132,042, dated October 8, 1872.

To all whom it may concern:

Be it known that I, ALBERT A. AMES, of Minneapolis, in the county of Hennepin and in the State of Minnesota, 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 the construction and arrangement of a "car-coupling," 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 side view; Fig. 2, a horizontal section of my car-coupling; Fig. 3 is a front or end view of the draw-head with the coupling-bar in perspective; and Fig. 4 represents modifications of the coupling-bar, and of a sliding pin used in my car-coupling.

A A represent the draw-heads, each of which has a central chamber, B, with suitable pin-holes *a* to use the common pin-and-link coupling, if desired. Upon one side of this chamber B is formed a chamber, C, the mouth of which is beveled and forms, a suitable distance inward from the front end, the shoulders *b b*, as shown in Fig. 2. On the opposite side of the central chamber B is another chamber, D, provided with a vertical L-shaped partition, E, the horizontal part of which is at the bottom, but does not extend clear across the chamber. This space is, however, occupied by a pin, G, which passes downward through a slot in the roof of the chamber D, and the lower end of which has a tenon, *d*, as seen in Fig. 1, fitting in a corresponding hole or slot in the bottom of the chamber. H represents the coupling-bar, having a spear-shaped point or head, *e*, the sides of which are beveled in auger-form. Back of this head or point is a square shank, *f*, which is provided with an enlargement forming square shoulders *h* at the back. From this point back the shank is

round, and upon its rear end is formed or attached a weighted arm, *k*.

By removing the pin G from the chamber D the coupling-bar H may be inserted from the rear into its place in said chamber, and when thus inserted the pin is put back in place again. The partition E and pin G fit, one on each side of the rounded part of the shank between the shoulders *h* and arm *k*, allowing the coupling-bar to turn, but it cannot be removed without first removing the pin G. When the cars are brought together, the head or point *e* of one coupling-bar enters the chamber C of the opposite draw-head; the beveled sides of said head striking the beveled mouth of the chamber causes the coupling-bar to turn until the head has entered, when the weighted arm *k* turns it back again, the back of the head catching on the shoulders *b b*. A chain or cord is to be attached to the arm *k* for turning the bar H in uncoupling from any desired part of the car.

In Fig. 4 I have shown a round enlargement on the shank of the coupling-bar H. In place of the partition E and pin G, constructed as above described, I may use a bifurcated pin, G', as shown in Fig. 4, to grasp the shank in rear of the round enlargement or bearing *h'*. Two pins may also be used, one on each side of the shank. The heads of the coupling-bars are slotted, as shown, so that they may be inserted in a common bumper and coupled with the usual pin, when a car with my coupling comes against a car with the common coupling.

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

The draw-head A, provided with central chamber B and side chambers C D, the chamber C having beveled mouth and shoulders *b b*, and the chamber D, the L-shaped partition E, link H, and pin G, all combined substantially as herein set forth.

In testimony that I claim the foregoing I have hereunto set my hand this 5th day of July, 1872.

Witnesses:

ALBERT A. AMES.

C. L. EVERT,
A. N. MARR.