G. W. McEWEN.

Car-Couplings.

No. 133,539. Patented Dec. 3, 1872.

Fig 1

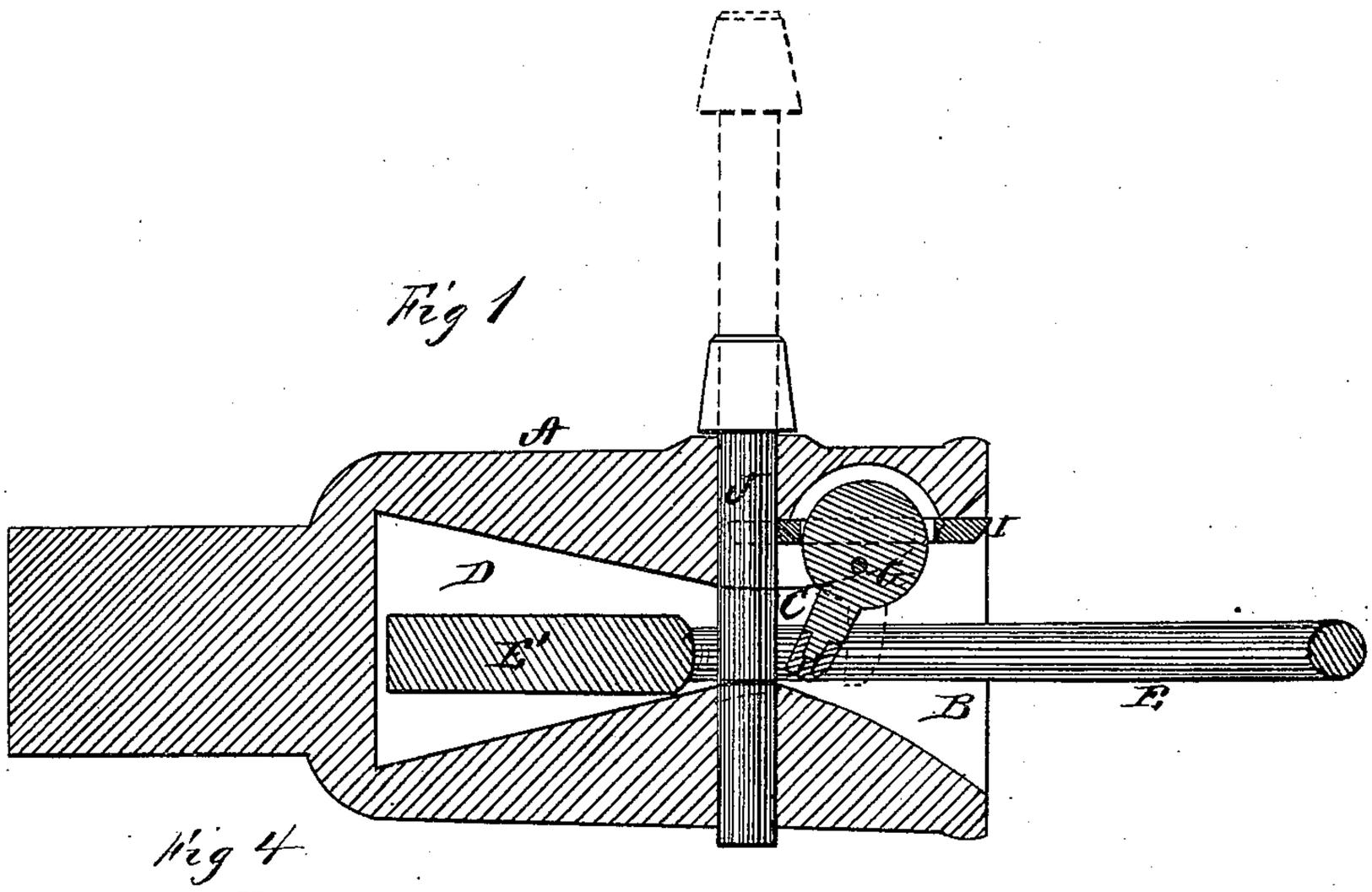


Fig 4

Fig 2

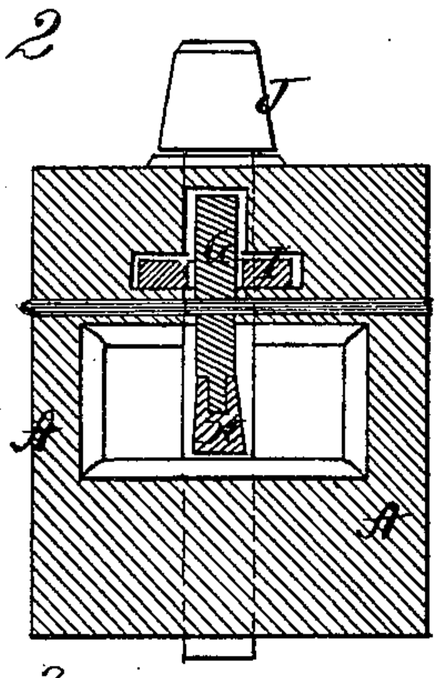
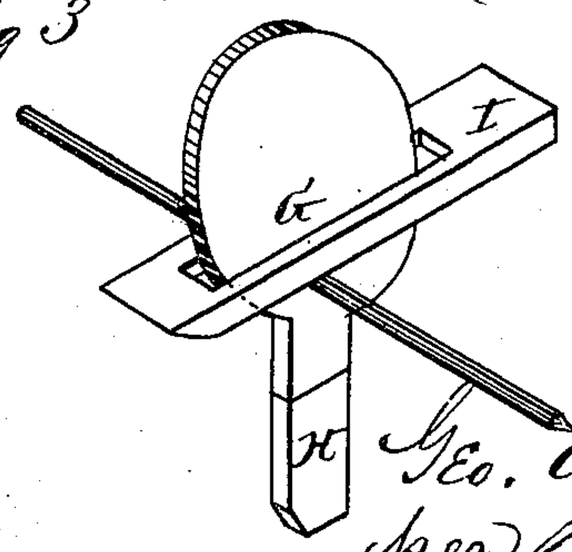


Fig 3



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UNITED STATES PATENT OFFICE.

GEORGE W. McEWEN, OF LOCK HAVEN, PENNSYLVANIA.

IMPROVEMENT IN CAR-COUPLINGS.

Specification forming part of Letters Patent No. **133,539**, dated December 3, 1872.

To all whom it may concern:

Be it known that I, GEO. W. McEWEN, of Lock Haven, in the county of Clinton, and in the State of Pennsylvania, have invented certain new and useful Improvements in Car-Coupling; 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.

My invention consists in the construction of the draw-head, provided with a self-gravitating bolt suspended on a pivot directly in front of the coupling-link, and operating a sliding gate, all as more fully hereinafter 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 longitudinal vertical section of my car-coupling. Fig. 2 is a transverse vertical section of the front end of the same. Fig. 3 is a perspective view of the device which supports the coupling-pin when the cars are uncoupled, and Fig. 4 is a plan view of the coupling-link.

A represents the draw-head, which is constructed with an opening or space, B, in front and running back, gradually contracting to a space, C, at the point of coupling; and from thence it extends back, forming a recess or chamber, D, in the rear sufficient to allow the end of the link to drop to the proper position for the purpose of coupling cars of an irregular height. E represents the coupling-link, provided at one end with a solid extension, E′, of such size and weight that it will balance the link when this end is placed in the draw-head, as shown in Fig. 1, and hold it in a horizontal position.

If the cars to be coupled are of the same height, the link will enter in this position; but, if they are of unequal height, the outer end will strike one of the sides of the mouth or chamber B, and they, being inclined, will guide the link into its place, the chamber D allowing the weighted end E′ to accommodate itself to such movement.

In the inner side of the top of the draw-head, immediately in front of the coupling-hole, are suitable grooves for the working of the self-gravitating bolt and slide.

G represents the gravitating-bolt, the upper end of which is made in circular shape and pivoted below the center of said circle in a groove in the head A. The lower end of the bolt G is provided with a weight, H. The upper end of the bolt passes through a slot in a horizontal slide, I, which moves in grooves in the head above the pivot-point of the bolt. The bolt G regulates and controls this slide I, which, when the bolt is at its proper equilibrium, runs back to a point, closing one-half of the hole containing the coupling-pin J, and upon which said pin rests.

The cars in coupling are designed to present the light end of the link, which drives back the end of the gravitating-bolt, the top part of which throws the slide forward, thus unclosing the coupling-hole, and leaving the coupling-pin free to drop readily within the limits of the link, making a complete and durable self-coupler.

The weighted end of the link should, to a certain extent, remain permanently attached to its draw-head.

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

1. The gravitating-bolt G, constructed as described, in combination with the slotted slide I and pin J, substantially as and for the purposes herein set forth.

2. In combination with the gravitating-bolt G, slide I, and pin J, the cast draw-head A with recesses B C D and link E E′, all substantially as set forth.

In testimony that I claim the foregoing have hereunto set my hand this 7th day September, 1872.

GEORGE W. McEWEN.

Witnesses:

JOHN E. FURST,

FRANK HEISLER.