J. G. STRICKLETT.

Car-Coupling.

No. 163,420. Patented May 18, 1875.

Fig. 1.

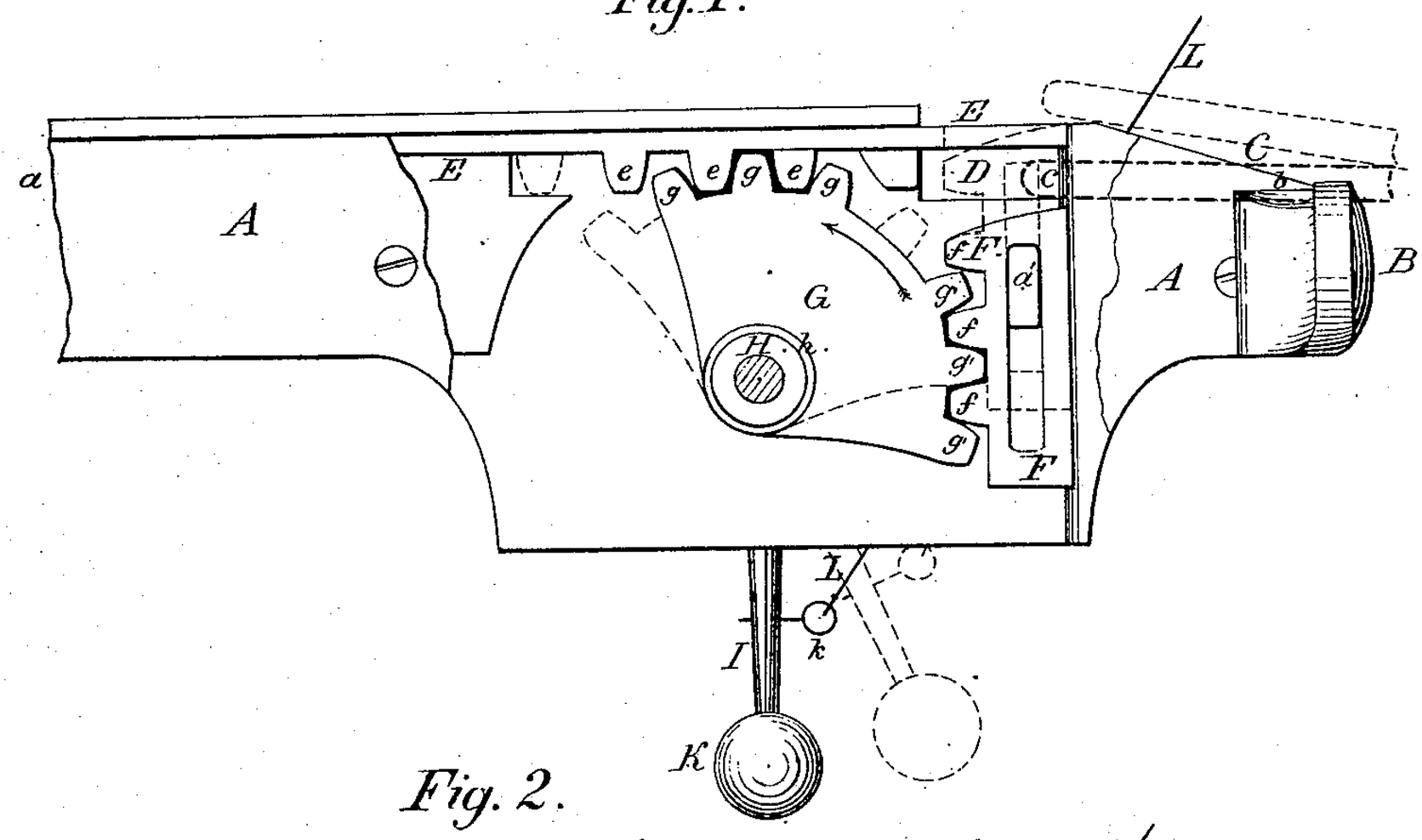


Fig. 2.

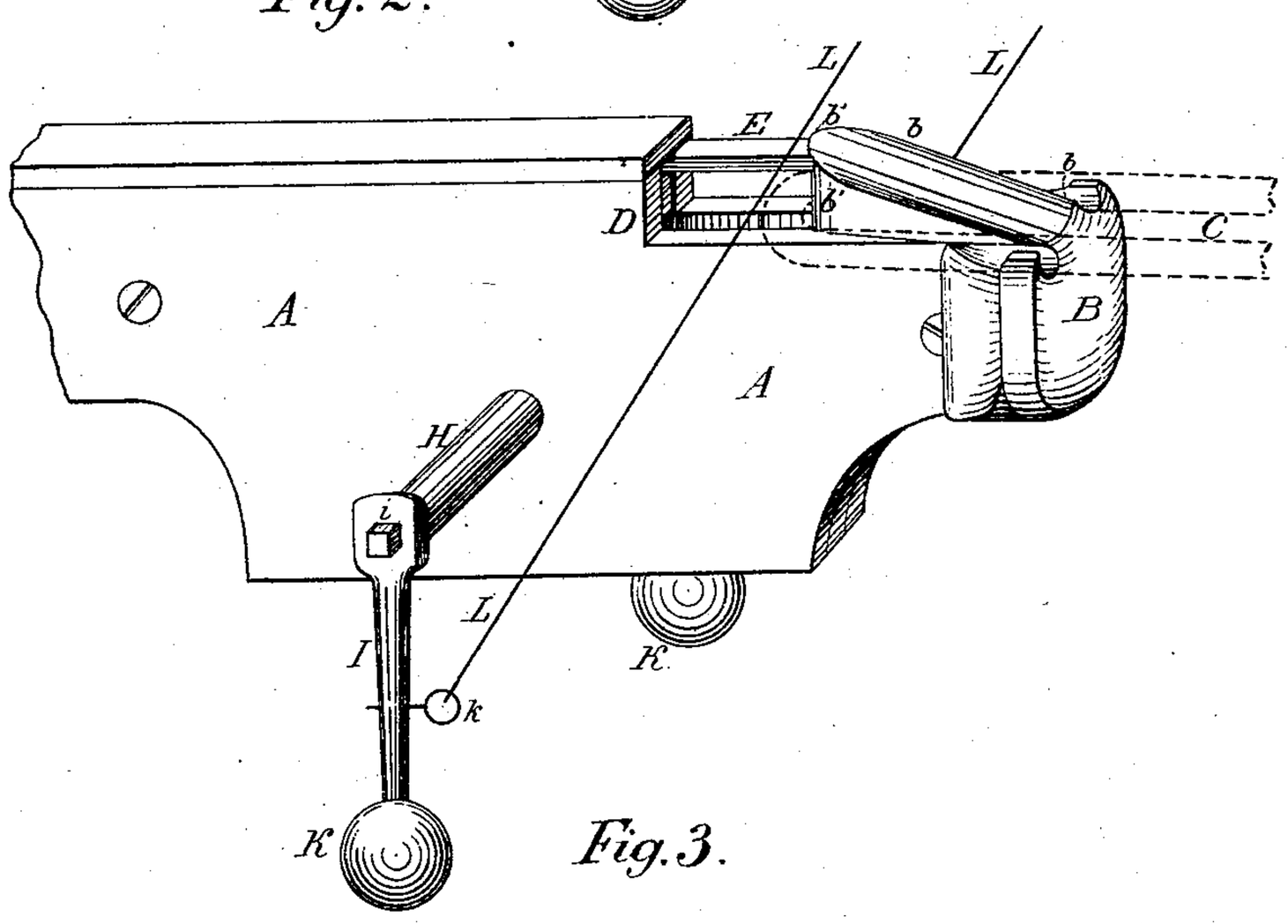
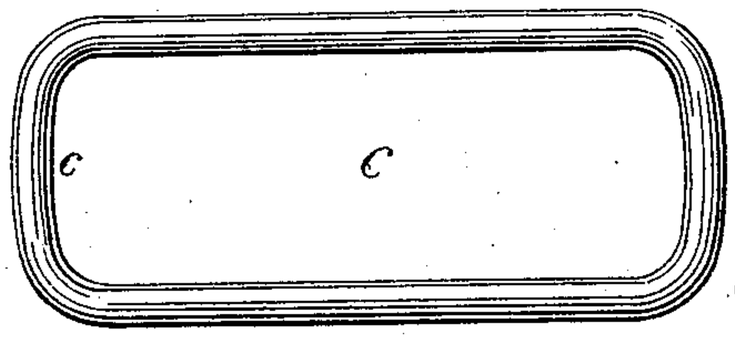


Fig. 3.



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JOHN G. STRICKLETT, OF PALO, IOWA.

IMPROVEMENT IN CAR-COUPLINGS.

Specification forming part of Letters Patent No. **163,420**, dated May 18, 1875; application filed October 31, 1874.

To all whom it may concern:

Be it known that I, JOHN G. STRICKLETT, of Palo, in the county of Linn and State of Iowa, have invented certain new and useful Improvements in Devices for Coupling Cars; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable others skilled in the art to which it pertains to make and use the same, reference being had to the accompanying drawings, and to the letters of reference marked thereon, which form a part of this specification.

Figure 1 is a side elevation of my improved car-coupling device, the side cover or plate being partially removed to show the construction. Fig. 2 is a perspective view of the coupler and link, and Fig. 3 is a plan of the double bar-link or coupler used in combination with my device.

Similar letters of reference indicate corresponding parts in all the figures.

This invention consists in an improvement of the mechanism of coupling-boxes, so that the cars may be coupled or uncoupled by a person standing on the platform or top of the car, as hereinafter more fully described, and pointed out in the claim.

A is the coupling-box, which is secured at *a* to the car in the usual manner. B is the front part or bumper of the box, which is of the shape shown in the drawing. The top slope *b* is hollowed out, so as to catch and guide the link C to the coupling-notch D, just to the rear of the bumper. This notch is a slot cut transversely in the top of the box, and serves to hold the link C in position, the strain or draft in pulling the cars being on the rear side *b'* of the solid bumper B, which is beveled to conform to the curve *c* of the link C, and this bevel also forms a guide for the bolt F, as hereinafter described. E is a horizontal bolt sliding in a recess under the top of the coupling-box, and provided with a series of projections, *e e e*, on its lower side, which engage with corresponding cogs *g g g* of the segmental rack G. This rack is secured upon a shaft, H, which is journaled in bearings *h* in the two sides of the coupling-box, and projects somewhat on both sides outside of the box. The projections or cogs *g' g' g'* on the segmental rack G engage with corresponding projections *f f f* on the vertical bolt F, which is slotted, and is kept in its position by a stationary guide, *a'*, secured to one side of the box. The side of this bolt which is nearest to and slides upon the rear side of the bumper is concave longitudinally, to conform to the bevel on the bumper B, already referred to. The projecting ends of the transverse shaft H are squared, to fit into mortises *i* of levers I, which are placed on said shaft outside the box, one on each side. Each of these levers has a weight, K, attached to its lower end, by which it is kept in a perpendicular position. It is also provided with a hook, *k*, to which is attached a rod or chain, L, which extends to the platform or top of the car, and by which the levers I are operated.

From the foregoing description, taken in connection with the drawings, the operation of my improved coupling device will be readily understood.

When the lever I, impelled by the weight K, is in the position shown in the drawing the segmental rack G within the box will be in the position shown in Fig. 1—that is, the horizontal lock-bar E will, by the projections *e e e* engaging with the cogs *g g g*, have been moved to a forward position, projecting out over and closing the coupling-notch D, as shown; but when, by pulling the rod L, the lever I is moved in a forward direction the segmental rack G will revolve in the direction indicated by the arrow in Fig. 1, and the horizontal lock-bar E will be moved backward, thus opening the notch, while at the same time and by the same operation the vertical unlocking or uncoupling bolt F is raised until its top reaches the top of the bumper B, thus throwing the link out of the notch D. To couple the cars, this motion is simply reversed.

By my improved mechanism herein described railroad-cars may be coupled or uncoupled without the least danger to the operators. The coupling, when done, is absolutely secure, while the uncoupling, when desired, is equally certain and expeditious.

Having thus described my invention, I claim and desire to secure by Letters Patent—

The mechanism for coupling and uncoupling railroad-cars, consisting of the box A, with its bumper B, provided with the coupling-notch D, in combination with the segmental rack G, horizontal lock-bar E, vertical bolt F, and levers I, all substantially as and for the purpose set forth.

In testimony that I claim the foregoing as my own I have hereunto affixed my signature in presence of two witnesses.

JOHN G. STRICKLETT.

Witnesses:

CALVIN NELSON,

EDWARD HUGHS.