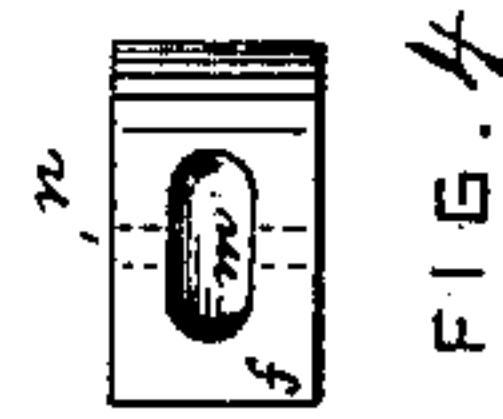
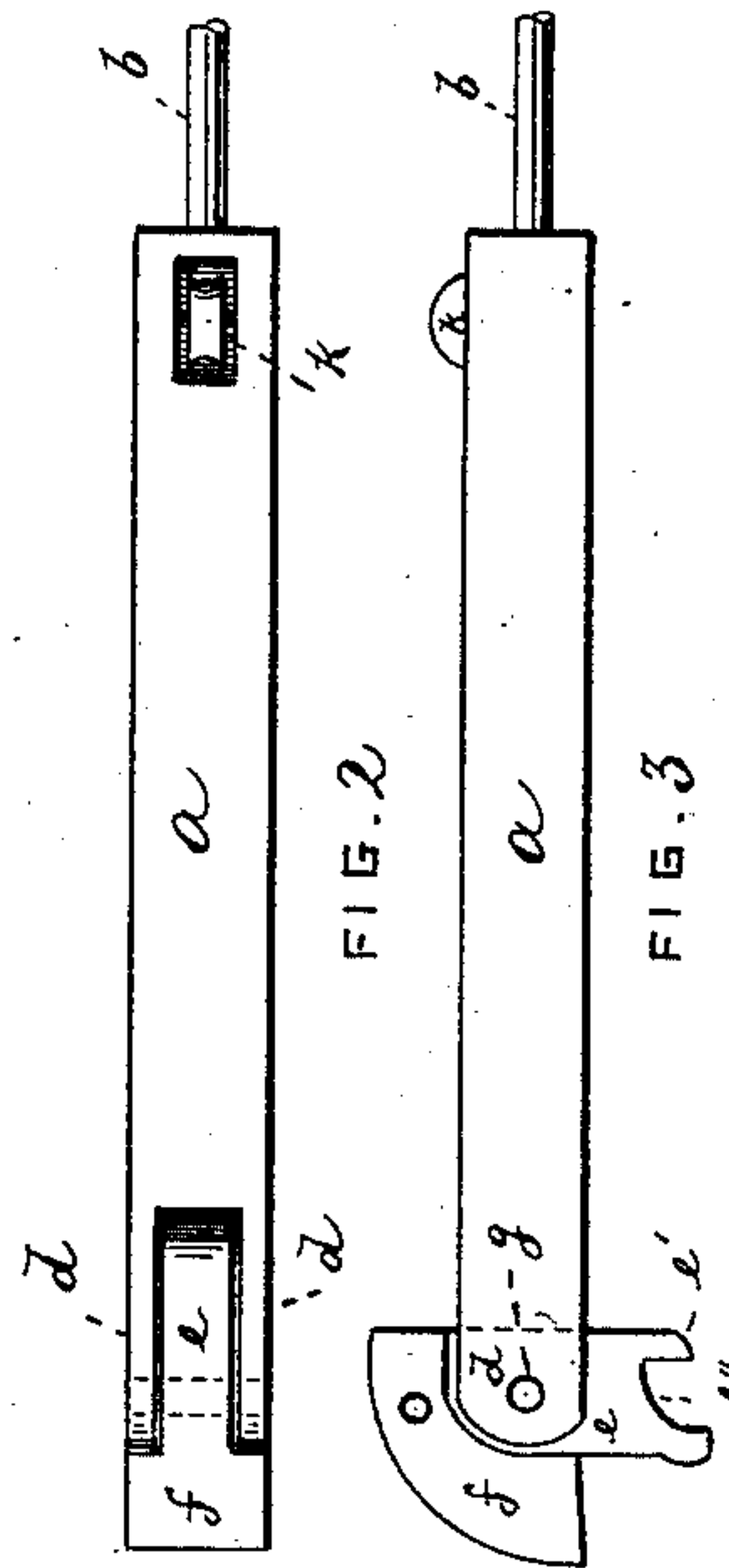
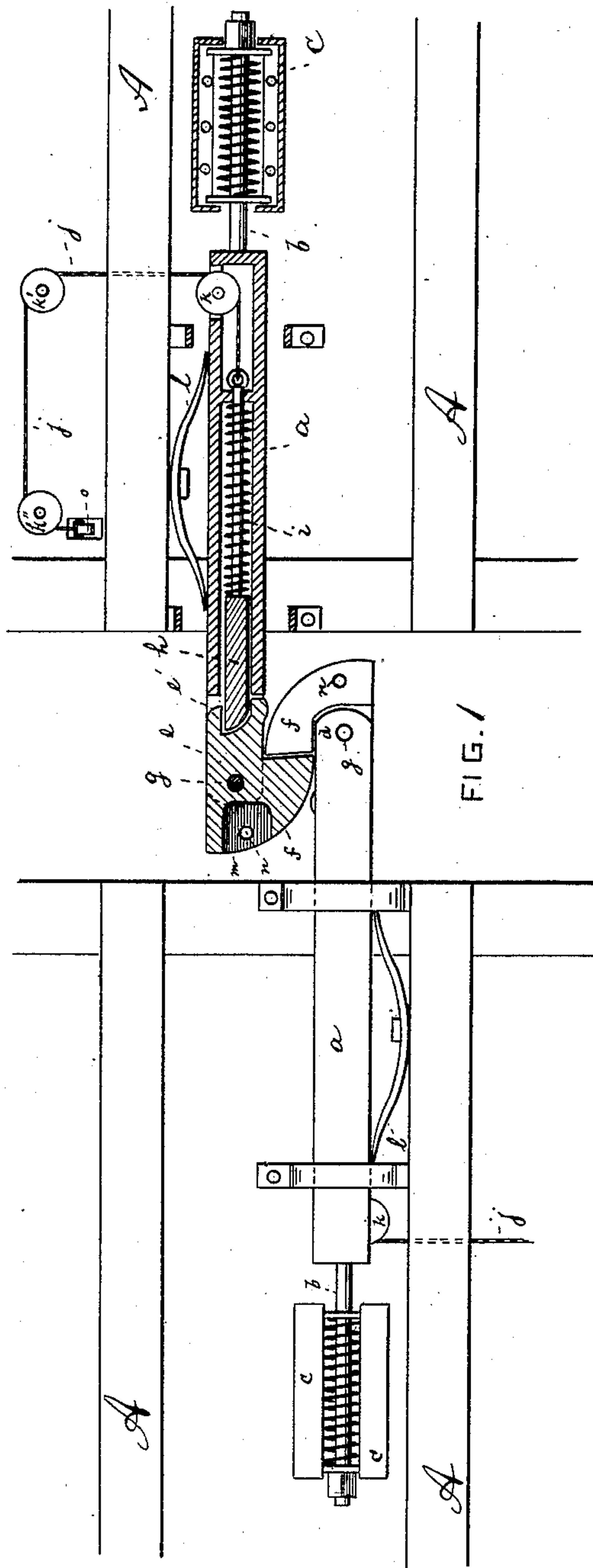


(No Model.)

F. A. FOX.
CAR COUPLING.

No. 367,613.

Patented Aug. 2, 1887.



WITNESSES

Wm. A. Howe
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INVENTOR

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by his attorney
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UNITED STATES PATENT OFFICE.

FRANK A. FOX, OF NEW YORK, ASSIGNOR OF ONE-HALF TO SELDEN S. GORDON, OF BROOKLYN, NEW YORK, AND BENJAMIN FRANKLIN, OF HOBOKEN, NEW JERSEY.

CAR-COUPLING.

SPECIFICATION forming part of Letters Patent No. 367,613, dated August 2, 1887.

Application filed November 23, 1886. Serial No. 219,591. (No model.)

To all whom it may concern:

Be it known that I, FRANK A. FOX, a citizen of the United States, residing at New York, in the county and State of New York, have
5 invented a new and Improved Car-Coupling, of which the following is a specification.

This invention relates to a car-coupling by means of which the cars may be readily connected and by which they may also be readily
10 disconnected in any position, even if not in line with each other.

The invention consists in the various features of improvement hereinafter more fully pointed out.

15 In the accompanying drawings, Figure 1 is a bottom view of the adjoining ends of a pair of cars provided with my improved coupling, showing one of the couplings in horizontal section. Fig. 2 is an end view of the coupling.
20 Fig. 3 is a top view thereof, showing it open; Fig. 4, a front view of the draw-head.

The letter *a* represents a hollow or tubular draw-bar terminating in a rod, *b*, which is attached at its rear end to the bottom of the car
25 *A*, in well-known manner, within a casing, *c*, so that the draw-bar has a slight lateral play. The forward end of the tubular draw-bar *a* is slotted horizontally to form two cheek-pieces, *d*, between which there is pivoted the shank
30 *e* of the hook or draw-head *f* by pivot-pin *g*.

Within draw-bar *a* there slides the bolt *h*, surrounded by spiral spring *i* and connected by chain *j*, passing over a pulley, *k*, pivoted to draw-bar *a*, and over pulleys *k'* *k''* to a hand-
35 lever, *o*, pivoted to the car-platform. The forward end of the spring-bolt *h* engages a slot or perforation, *e''*, in rear end of shank *e*. When the spring-bolt is withdrawn, the head *f* will be unlocked and may turn on pivot *g*.

40 *l* is a spring that tends to throw one head *f* into engagement with the adjoining head. The face of each head *f* is recessed, as shown at *m*,

to receive the usual car-coupling link, in case only one of the cars to be coupled is provided with my improved coupling. The link introduced into recess *m* is held in place by a pin,
45 that may be introduced through an aperture, *n*, made in the end of head *f*, and opening into recess *m* at right angles thereto.

When it is desired to uncouple a pair of cars
50 provided with my improved coupling, one or both of the spring-bolts *h* are withdrawn by lever *o* to permit the heads *f* to become disengaged. It will be seen that even if the cars are not in line with each other the spring-
55 bolts may always be readily withdrawn. The cars may be re-coupled before or after the heads *f* are locked to the draw-bars.

The forward end of bolt *h* is beveled, as shown at *h'*, and the rear edge of shank *e* is
60 beveled, as shown at *e'*. When the head *f* is to be locked to the draw-bar *a* and is swung on pivot *g*, the bolt *h* will be crowded back by bevels *e' h'* to permit the passage of the shank *e* between cheeks *d*.
65

What I claim is—

1. The combination of tubular draw-bar *a*, having cheek-pieces *d*, with the hook-shaped draw-head *f*, having slotted shank *e*, pivoted to said cheek-pieces, and having beveled edge
70 *e'*, and with spring-bolt *h*, sliding within draw-bar *a* and having beveled edge *h'*, substantially as set forth.

2. The combination of tubular draw-bar *a*, having cheek-pieces *d*, with the draw-head *f*,
75 having slotted and beveled shank *e*, pivoted to said cheek-pieces, and with the spring-bolt *h*, having beveled edge *h'*, and with the spring *l*, pulleys *k k' k''*, chain *j*, and lever *o*, substantially as described.

FRANK A. FOX.

Witnesses:

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S. S. GORDON.