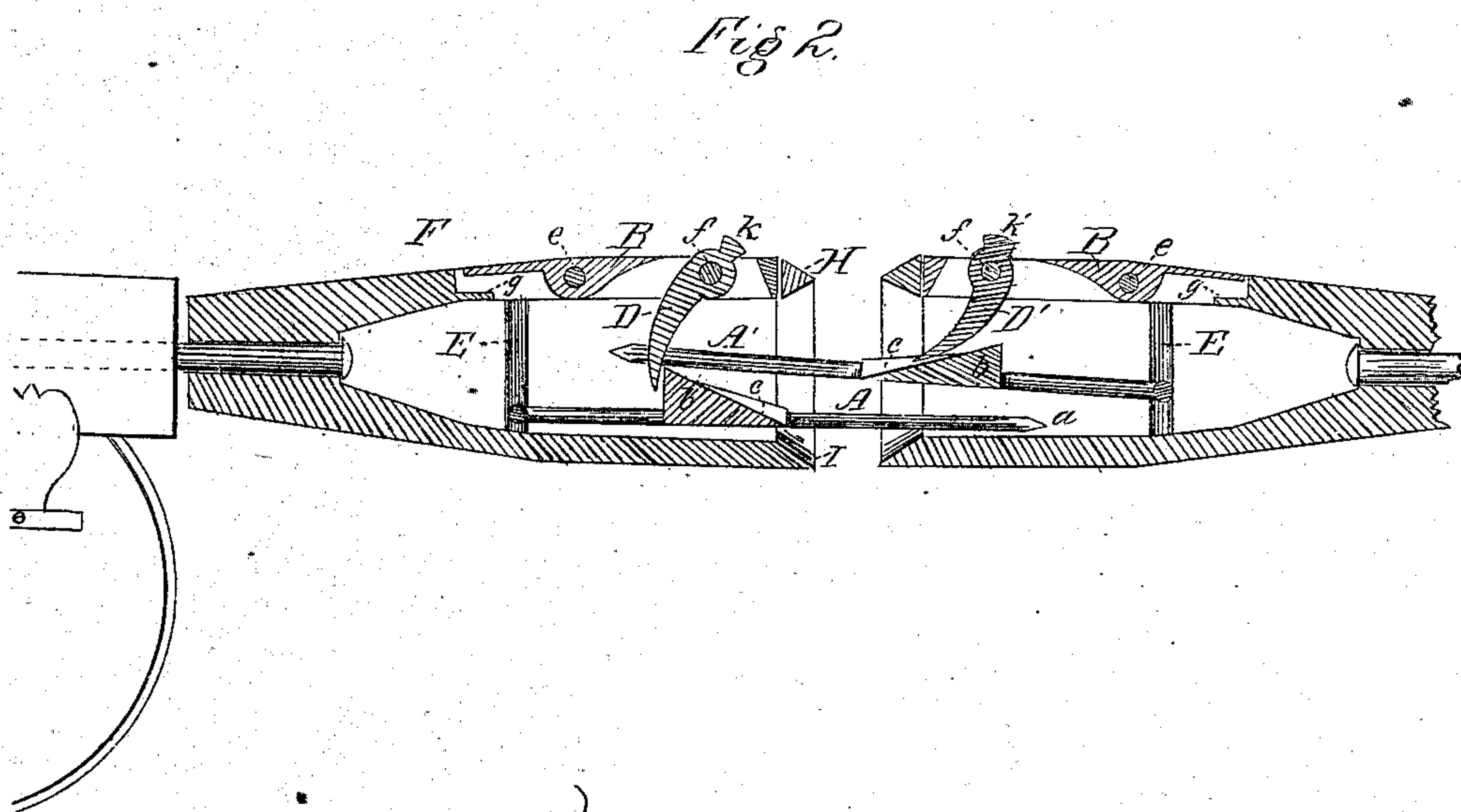
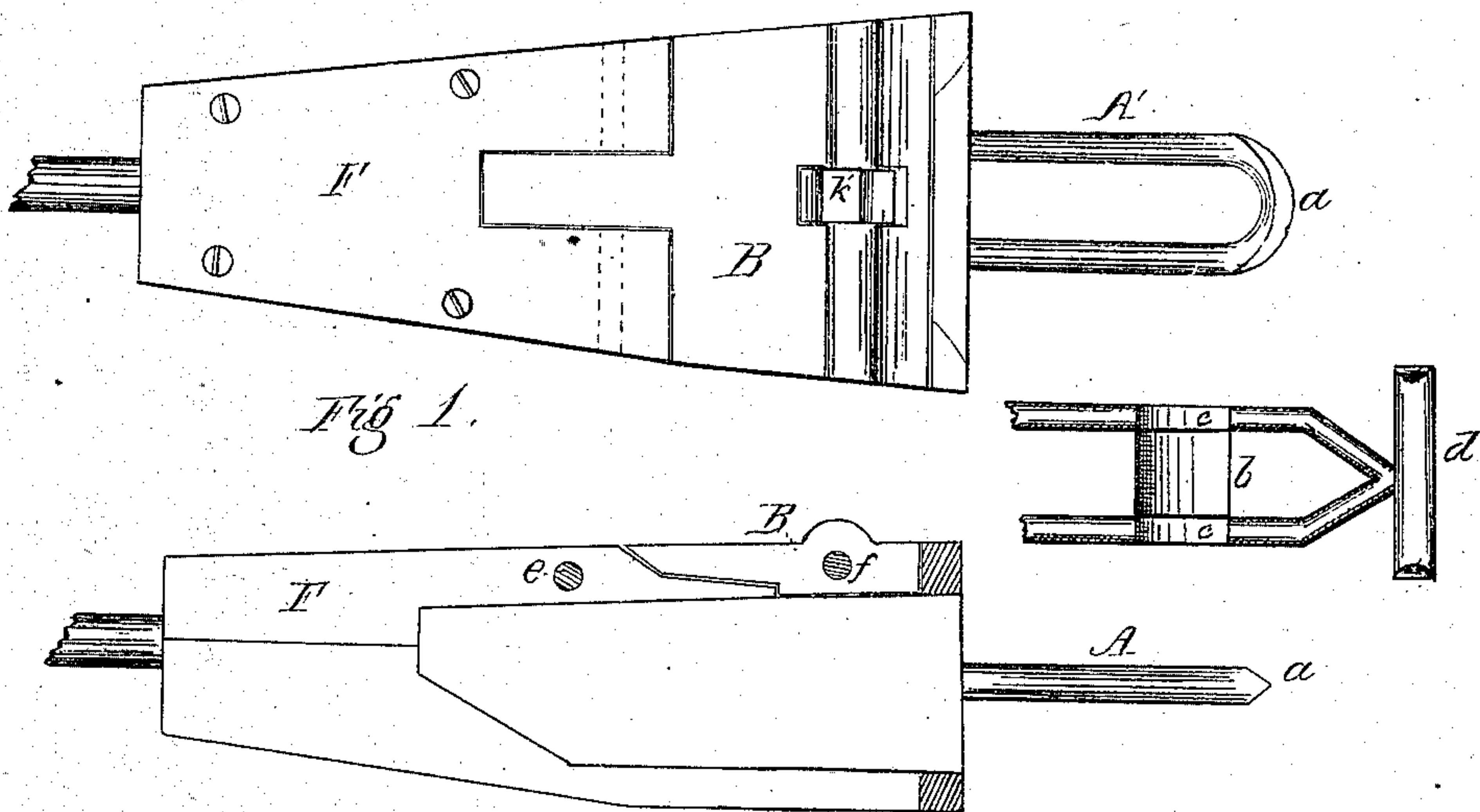


P. F. McCLURE.
Car-Couplings.

No. 158,597.

Patented Jan. 12, 1875.



WITNESSES:

J. McClure
H. H. Snyder

INVENTOR:

Patented Francis M. Chase
per Cha. H. Fowler
Atty.

UNITED STATES PATENT OFFICE.

PATTISON F. McCLURE, OF JUNCTION CITY, KANSAS.

IMPROVEMENT IN CAR-COUPPLINGS.

Specification forming part of Letters Patent No. 158,597, dated January 12, 1875; application filed November 13, 1874.

To all whom it may concern:

Be it known that I, PATTISON FRANCIS McCLURE, of Junction City and State of Kansas, have invented a new and useful Improvement in Automatic Car-Couplers; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawings, forming a part of this specification, in which—

Figure 1 is a plan and side view of the draw-heads, and a detached view of one of the connecting-links, showing the bevel guide-piece and T-shaped end; Fig. 2, a vertical section of the draw-heads.

This invention has relation to that class of couplings constructed to operate automatically; and my invention consists in the combination and arrangement of parts, as will be hereinafter more fully described.

F F' in the drawings are intended to represent the draw-heads proper.

In describing the construction and operation of my automatic coupler, I shall refer to only one of the draw-heads and its operating mechanism, which I deem sufficient in making my invention understood.

In the top of the draw-head F, before referred to, is fitted a lever, B, connected thereto by a pin, *e*, operating as a fulcrum-pin, upon which the lever B works. Attached to the front of this lever is a coupling-pin, D, having a slight curve, and gradually tapering to a point, and is held in place by a bolt, *f*, which allows it to move freely back and forth in the lever B. A is the coupling-link, having its front edge beveled, as shown at *a*, and provided upon its face or upper side with a beveled projection, *b*, upon each side of which are formed guides *c c*. The link A has its end T-shaped, the beveled ends of the cross-bar *d* entering a recess, E, formed in the side of the draw-head F, so that the bar *d* will remain securely fastened therein so long as the draw-heads are in a level position; but if any of the cars assume an angular position, or jump the track, that part of the draw-head attached to such car would also assume an inclined position, which would release the cross-bar *d* from the recess E, and thereby disconnect the coupling-link A, releasing the car from the rest of the train.

The operation of my coupling is as follows:

When desired to couple the cars, the links A A' are brought together, the beveled edges thereof allowing the links to freely pass each other, the link A' passing above the link A, and traveling over the guides *c c*, which prevent the link from striking under the point of the pin D, coming in contact with the same, and causing it to slide back over the beveled face of the projection *b*, and at the same time raising the lever B until the pin D falls through the link A', when the lever B immediately falls back into place, and causes the pin D to impinge against the projection *b* on the face of the link, thus securely fastening and connecting the draw-heads together.

When the couplings are to be released, the person whose duty it is stands at either side of the car, and raises a suitable lever, which is connected with the pins D D' in such a manner that, by raising the lever, the pins are forced outward, disengaging them with the links A or A', as the case may be, and uncoupling the cars.

If desired other means may be used, which would be considered equally well adapted in accomplishing the purpose.

I claim as my invention—

1. The combination, in the draw-heads F F', of the links A A', having their front edges beveled and provided with projections upon their faces, against which the coupling-pins impinge, substantially as and for the purpose set forth.

2. The combination, in the draw-heads, of the links A A', having their front edges beveled, and the inclined projections *b b*, provided with guides *c c*, the links at one of their ends being of T-shape form, adapted to fit and work in grooves or recesses formed in the sides of the draw-head.

3. In an automatic car-coupler, the levers B B' and pins D D', in combination with the links A A', all constructed substantially as set forth.

4. The automatic car coupler, consisting of the levers B B', pins D D', links A A', provided with bevel projections *b b* and guides *c c*, all constructed to operate as set forth.

PATTISON FRANCIS McCLURE.

Witnesses:

J. B. McCLURE,
H. H. SNYDER.