## W. A. COCHRAN. Car-Couplings.

No. 144,658.

Patented Nov. 18, 1873.



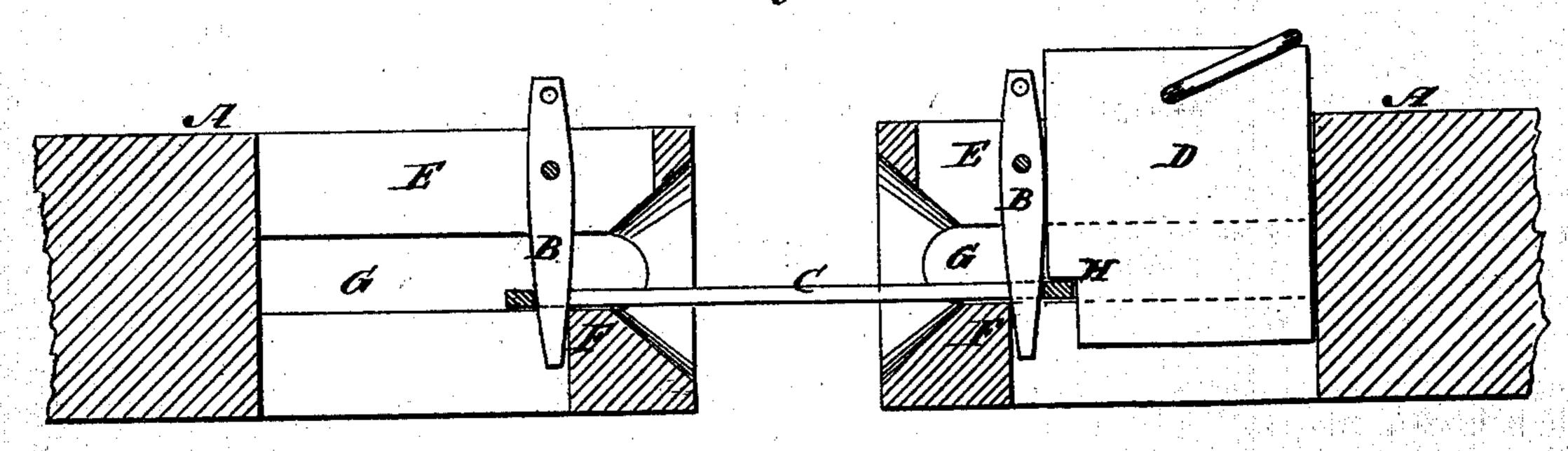
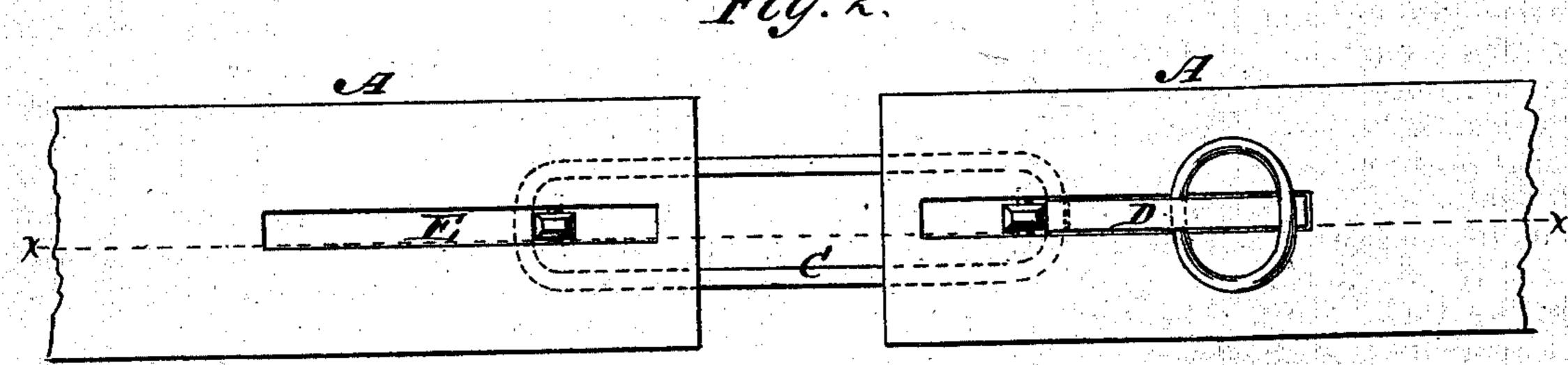


Fig. 2.



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WILLIAM A. COCHRAN, OF FLAT ROCK, INDIANA, ASSIGNOR TO HIMSELF AND JAMES T. BURCH, OF SAME PLACE.

## IMPROVEMENT IN CAR-COUPLINGS.

Specification forming part of Letters Patent No. 144,658, dated November 18, 1873; application filed August 4, 1873.

To all whom it may concern:

Be it known that I, WILLIAM A. COCHRAN, of Flat Rock, in the county of Shelby and State of Indiana, have invented a new and useful Improvement in Car-Coupling, of which the following is a specification:

This invention relates to apparatus for coupling railroad-cars together; and consists in the construction and arrangement of parts herein-

after described.

In the accompanying drawing, Figure 1 represents a vertical longitudinal section of Fig. 2 taken on the line x x. Fig. 2 is a top or plan view.

Similar letters of reference indicate corre-

sponding parts.

A A are the draw-heads. BB are the coupling-pins; C, the link; D, a removable and changeable backing-block. E E are vertical mortises through the draw-heads. The coupling-pins are pivoted in these mortises so that they can turn to a position parallel with the draw-heads, but hang vertical when in their normal position. The link is of the common old-fashioned kind, and passes into the drawheads in recesses G G, which are at right angles with the mortises E E, but also parallel with the draw-heads. The draft of the link is on the pivots, and against the ends of the mortises at the points FF, against which the pin bears, as seen in Fig. 1. The block D, of either wood or metal, is made to fit into the mortises E E, and to fill the space between

the pin and the end of the mortise and hold the pin in a vertical position. H is a notch in the block, which receives the end of the link, and serves to hold the link in a horizontal position in the draw-head, which is at rest, so that it will readily enter the approaching drawhead, and render it unnecessary to endanger life or limb by going between the cars to guide the link in coupling.

As seen in Fig. 1 the cars are coupled. In coupling, the end of the link strikes the loose pin, and pushes it back to nearly a horizontal position, when it drops into the link by its own gravity, and the cars are coupled.

The block D and link may be placed in either draw-head, but preferably in the one which is at rest; and the block may be changed from one car to another, as occasion may require.

It will be seen that when the cars come together they couple automatically, thus saving much time, and avoiding all danger.

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

A draw-head, provided with a pin, B, and having mortise E and recess G, in combination with the changeable block D, substantially as and for the purpose described.

WILLIAM A. COCHRAN.

Witnesses:

LEVI RUNSTRE, AMOS BOYNE.