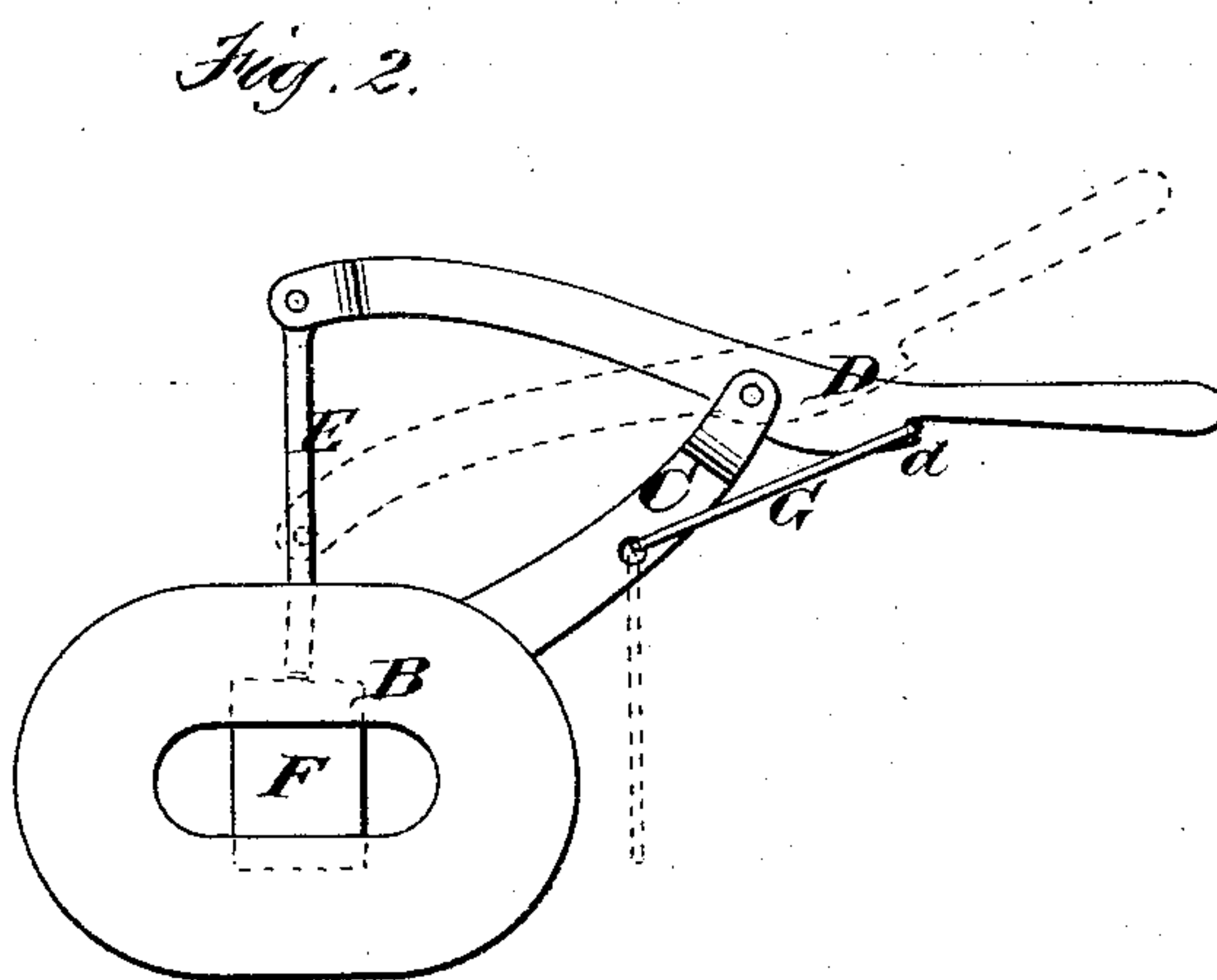
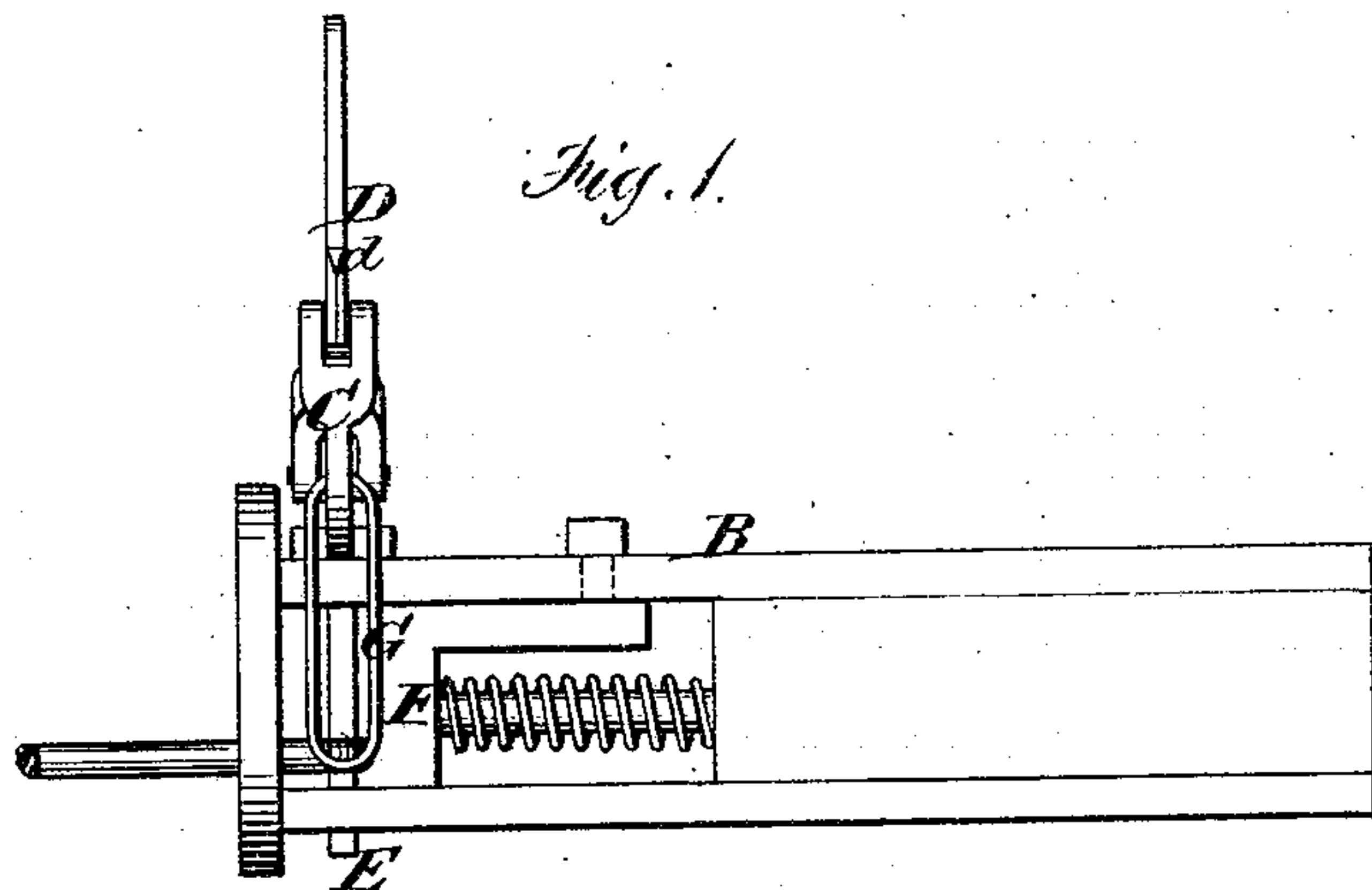


T. BYRD, Jr.  
Car-Couplings.

No. 157,370.

Patented Dec. 1, 1874.



Witnesses.  
C. F. Brown.  
M. Church-

Inventor  
Turner Byrd, Jr.  
by his Attys.  
Hill & Greenworth.

# UNITED STATES PATENT OFFICE.

TURNER BYRD, JR., OF WILLIAMSVILLE, MICHIGAN.

## IMPROVEMENT IN CAR-COUPPLINGS.

Specification forming part of Letters Patent No. **157,370**, dated December 1, 1874; application filed May 29, 1874.

*To all whom it may concern:*

Be it known that I, TURNER BYRD, Jr., of Williamsville, in the county of Cass and State of Michigan, have invented a new and useful Improvement in Car-Couplings; and I do hereby declare the following to be a full, clear, and exact description of the same, reference being had to the accompanying drawings, forming part of this specification, in which—

Figure 1 is a side elevation, showing the position of the coupling-pin when the cars are coupled; and Fig. 2 is a front elevation, showing the coupling-pin raised and the operating-lever locked.

Similar letters of reference in the accompanying drawings denote the same parts.

This invention relates more particularly to that class of automatic car-couplings in which sliding blocks, situated within the draw-head, are employed for the purpose of supporting the coupling-pin until the link of an approaching car forces the block backward far enough to release said pin, and allow it to drop through the link, thus effecting the coupling of the cars.

The invention consists in providing means whereby the uncoupling of cars can be effected without the necessity of going between the cars for such purpose, and also in a device for suspending the link above the sliding block, and lock it in that position when so desired, all which I will now proceed to describe.

In the drawings, B represents a draw-head, of common construction, and C is an arm rigidly secured to the top of said draw-head, and projecting transversely thereto. D is a lever, pivoted to the arm C, its outer end or handle projecting to the side of the car-platform, while its other end projects over the draw-head, where it is articulated to the coupling-pin E, the latter resting on the sliding block F, within the draw-head, as shown.

It is evident, from the above construction, that when the link from an approaching car enters the draw-head B, the sliding block F will be forced backward until the pin E is released, the latter dropping down through the link, and thus effecting the coupling.

When it is desired to uncouple the cars the operator stands at the side of the train and depresses the lever D, by which movement the coupling-pin is drawn, and the cars are uncoupled without danger to the operator.

It is often desirable, when using automatic couplers of this class, to throw the coupling out of operation, and hold it in that position, so that the car upon which it is placed may come in contact with other cars without coupling thereto. Ordinarily this cannot be effected without entirely removing the coupling-pin; but if this is done the pin is liable to be lost. To obviate this defect I provide the operating-lever D with a suitable shoulder, *d*, on its outer end, with which a catch, G, pivoted to the arm C, is adapted to engage when the lever is depressed.

By this arrangement it will be seen that, whenever the coupling is to be thrown out of operation, the lever is depressed, and the catch made to engage with the shoulder *d*, thus securely locking the lever, and holding the coupling-pin in an elevated position.

My improvement can be advantageously applied to the common link-and-pin coupling, and many serious accidents may be prevented by its use thereon, as the operator is not obliged, under any circumstances, to go between the cars.

By attaching a chain or other suitable connection to the inner end of the operating-lever the cars may be uncoupled from the car-platform.

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

The catch G, pivoted to the arm C, and adapted to engage with a shoulder, *d*, on a lever, D, pivoted to said arm C, the coupling-pin being in an elevated position, all combined substantially as described, and for the purpose specified.

TURNER BYRD, JR.

Witnesses:

AUSTIN JAMES,  
RABBI GOIN.