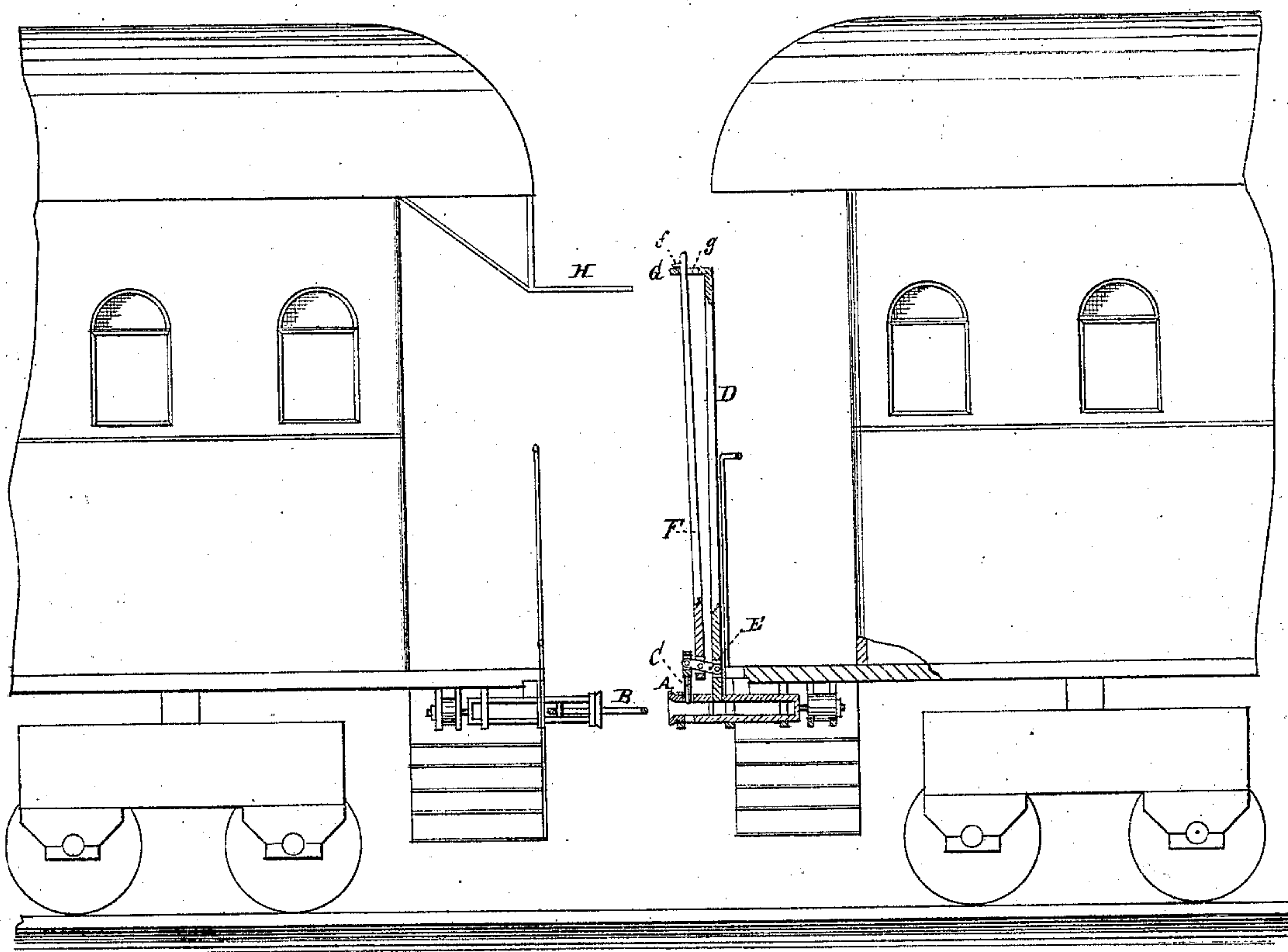


D. SOUTHERLAND.

## Improvement in Car-Couplings.

No. 133,268.

Patented Nov. 19, 1872.



Witnesses:  
G. Watkins.  
Solomon Remond

Inventor:  
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 Attorneys.

# UNITED STATES PATENT OFFICE.

DARIUS SUTHERLAND, OF MILO, ILLINOIS.

## IMPROVEMENT IN CAR-COUPPLINGS.

Specification forming part of Letters Patent No. 133,268, dated November 19, 1872.

*To all whom it may concern:*

Be it known that I, DARIUS SUTHERLAND, of Milo, in the county of Bureau and State of Illinois, have invented an Improved Car-Coupling, of which the following is a specification:

The invention relates to that special class of car-couplings which are made to couple the cars automatically or by impact; and consists in attaching the pin to a lever and weighted lift-bar, arranged outside of the draw-head and above the platform of car, whereby a projection from the top of one car is made to strike the lift-bar, whose weight then turns the lever on its fulcrum and carries down the pin into the link.

In the drawing, the figure represents a longitudinal central section.

A represents the draw-head of a car, B an ordinary coupling-link, and C the usual coupling-pin. Having found by experiment and practical experience that the automatic couplings which have mechanism confined to the limited space within the draw-head allow the pin to drop at the wrong time and are not visible to the coupler, I have endeavored to remedy these difficulties and secure a coupling that is both automatic and plainly visible to the man whose business it is to see that the cars are properly attached together. In order to accomplish this object, I erect a post, D, on one platform of a car, and near its bottom pivot the lever E, to whose other end is pivoted the coupling-pin C. F is a lift-bar, which may be weighted or made so heavy that it will be quickly pushed down by the gravity

of the lift-bar, lever, and pin. This lift-bar, being pivoted to lever E, works in slot *g* of the top piece G, and has a pin, *f*, placed at right angles thereto and just above the upper face of said top piece. H is a projection from another car, which is to be coupled with the one carrying-pin. It is arranged, preferably, in a plane below that of top piece G, although it may be placed at some other point above or below.

The operation is as follows: When the coupling-pin is not in use the lift-bar F is held by the pin *f* on the top piece G; but when another car having a link, B, comes in contact therewith its projection H strikes the lift-bar, unlocks it from top piece, allows it to carry down the lever and pin, and quickly couples the two cars. Of course, in uncoupling, the lift-bar must be raised by hand.

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

The lift-bar F having pin *f*, the slotted top piece G attached to upright D, and the lever E combined with a car-coupling pin, C, as described, so that it may be readily and automatically operated by a projection, H, on another car.

To the above specification of my invention I have signed my hand this 20th day of August, 1872.

DARIUS SUTHERLAND.

Witnesses:

L. J. BATES,  
SAMUEL GALLAHER.