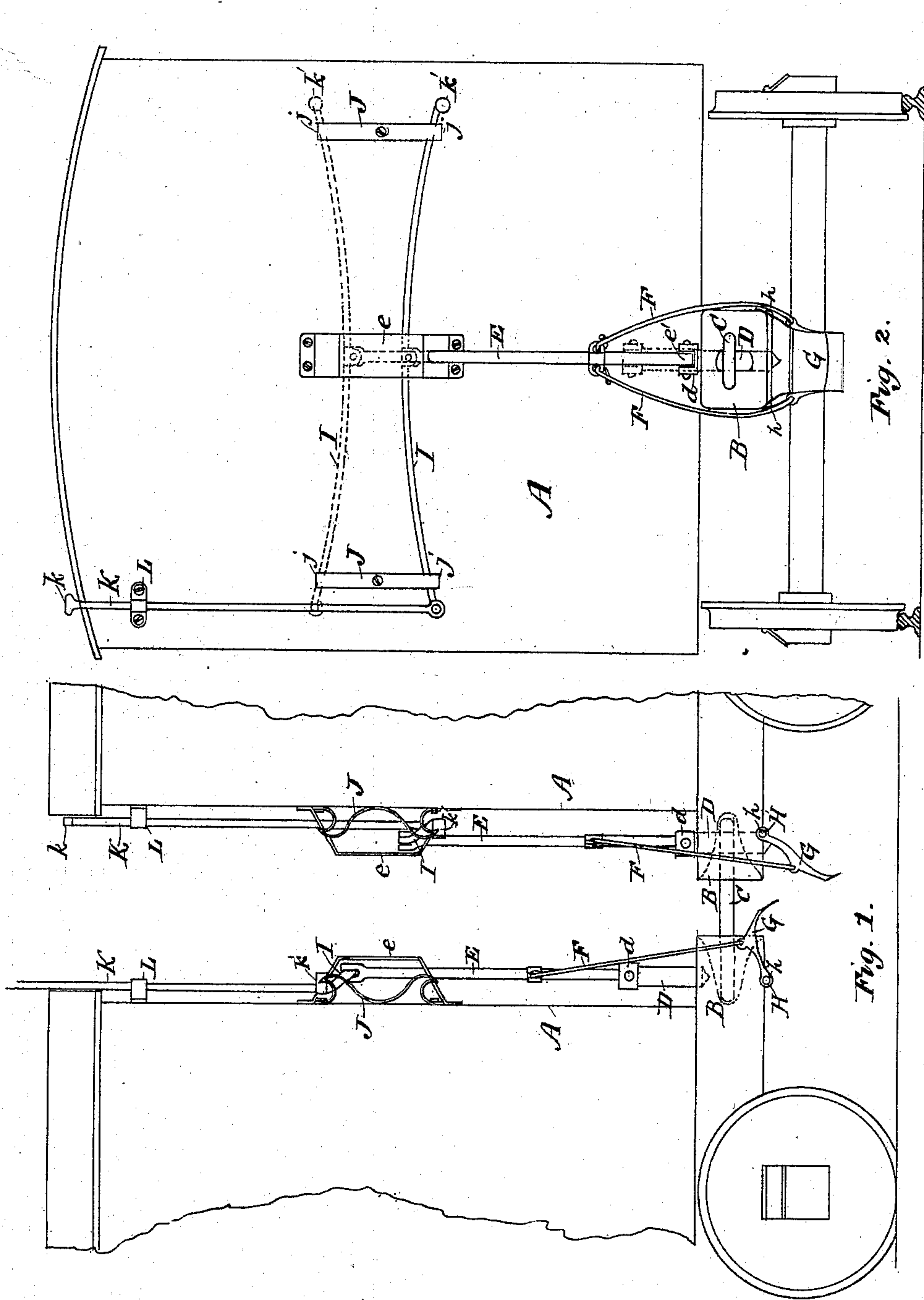


(No Model.)

W. ADAMS.  
CAR COUPLING.

No. 270,171.

Patented Jan. 2, 1883.



WITNESSES.

*Richard Martin Jr.*  
*Levi Jewell*

INVENTOR.

*William Adams*  
By his attorney  
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# UNITED STATES PATENT OFFICE.

WILLIAM ADAMS, OF SALEM, OREGON.

## CAR-COUPLING.

SPECIFICATION forming part of Letters Patent No. 270,171, dated January 2, 1883.

Application filed May 17, 1882. (No model.)

*To all whom it may concern:*

Be it known that I, WILLIAM ADAMS, a resident of the city of Salem, in the county of Marion and State of Oregon, have invented certain new and useful Improvements in Car-Coupling Attachments, of which the following is a specification.

My invention relates to an arrangement of mechanism which can be attached to and used with the ordinary car-coupler used upon freight or box cars on railroads; and the object of my invention is to construct such an attachment for car-couplers arranged to be operated by hand, either from the track or car, so that the operation of coupling or uncoupling can be performed without danger of hurt or accident to the operator; and my invention consists, first, in attaching the ordinary coupling-pin to a vertical adjusting-shaft suitably located on the car, together with a spring-lever for operating the same; secondly, by attaching to an ordinary draw-head a sheet-iron apron or guide, which answers the twofold purpose of preventing the link from dropping down when the cars are being coupled, and acts as a fulcrum for the loop-shaped rod and vertical shaft; thirdly, by attaching to the car rests for the horizontal spring-lever to rest in when the car is coupled or uncoupled.

In the accompanying drawings, forming part of this specification, Figure 1 is a view in vertical section of the ends of two cars, showing my invention attached to each car coupled and uncoupled; and Fig. 2 is an end of a car, showing my invention in detail, the dotted lines showing the manner of operation and movement of my attachment.

A A are the ends of two ordinary railroad box-cars.

B B are the draw-heads.

C is the link, and D the coupling-pin.

E is a shaft, which is adjustable vertically in a box, *e*, attached to the car. The lower end of shaft E is attached to the pin D, a wedge, *e'*, being formed thereon, which fits into pin D above its flange *d*, and are held together by bolt and nut or key, so that in the event of a pin breaking the broken part can be disconnected from the shaft E and a new pin inserted.

F is a loop-shaped steel or iron rod, the upper ends of which are fastened upon shaft E, from which point it spreads out around the draw-head B, and is swiveled underneath the draw-head in an apron or guide, G, made of sheet-iron of suitable caliber, the upper ends of this apron G being swiveled upon the projecting ends of a shaft, H, attached to the under side of the draw-head B of the car A, and acts as a fulcrum when the operation of coupling or uncoupling is being performed, and also prevents the link C from dropping down. Nuts or keys *h h'* on shaft H prevent the ends of apron G from slipping off.

I is a horizontal spring-steel rod or lever, swiveled at its center in vertical shaft E.

J J are rests attached to the ends of each car, one on each side, by bolts and nuts. These rests J J act as fulcrums for lever I when in operation, and as retaining-catches at *j' j'* when the cars are coupled or uncoupled, as the case may be.

K is a rod, with hand-grip formed thereon at *k*, and is attached to one end of lever I, and is for the purpose of adjusting the coupler from the car, and on the other end of lever I is another handle, *k'*, to adjust the coupler from the track. Rod K is adjustable vertically in a hollow box, L, upon the car.

The operation of my invention is as follows: When it is desired to uncouple two cars the operator or brakeman takes hold of the handle K and, depressing that end of the rod I, throws the other end upward and into catch *j* of rest J on opposite side of car. He then pushes up the end he has hold of into catch *j* of that side of car. This action pulls up vertical shaft E and pin D and the cars are uncoupled. When it is desired to couple the cars, then the handle end of lever I is raised and the other depressed until it comes under and into catch *j'*, when the handle end of rod I is pulled down under catch *j'* of that side and the cars are coupled.

During the operations of uncoupling or coupling the apron G and loop-shaped rod F act as a brace to keep the coupling-pin D and link C in position, the apron raising up link C and guiding it when the cars are being coupled, and even when the cars come together without

being coupled the apron will raise and hold up the link and prevent it from being snapped or broken by dropping down between the draw-heads, and when the cars come together there  
5 will be no injury to the apron, as it will give way by reason of the spring motion of lever I.

The apron G and its attachment I claim as a very important feature of my invention, as it virtually obviates the breaking of links between  
10 the draw-heads when the cars come together.

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

1. In combination with vertical shaft E, horizontal lever I, and rests J J j j' j', operating  
15 as shown, and for the purpose set forth.

2. The combination of handle K with horizontal spring-lever I, vertical shaft E, and pin D, for the purpose set forth.

3. In combination with an ordinary draw- 20 head coupling, apron G, loop-shaped rod F, link C, pin D, vertical shaft E, box e, spring-lever I, rests J J j j' j', shaft H h h, and handle K k k', substantially as herein shown and set forth.

WILLIAM ADAMS.

In presence of—

G. G. GAMMANS,

D. P. KENNEDY.