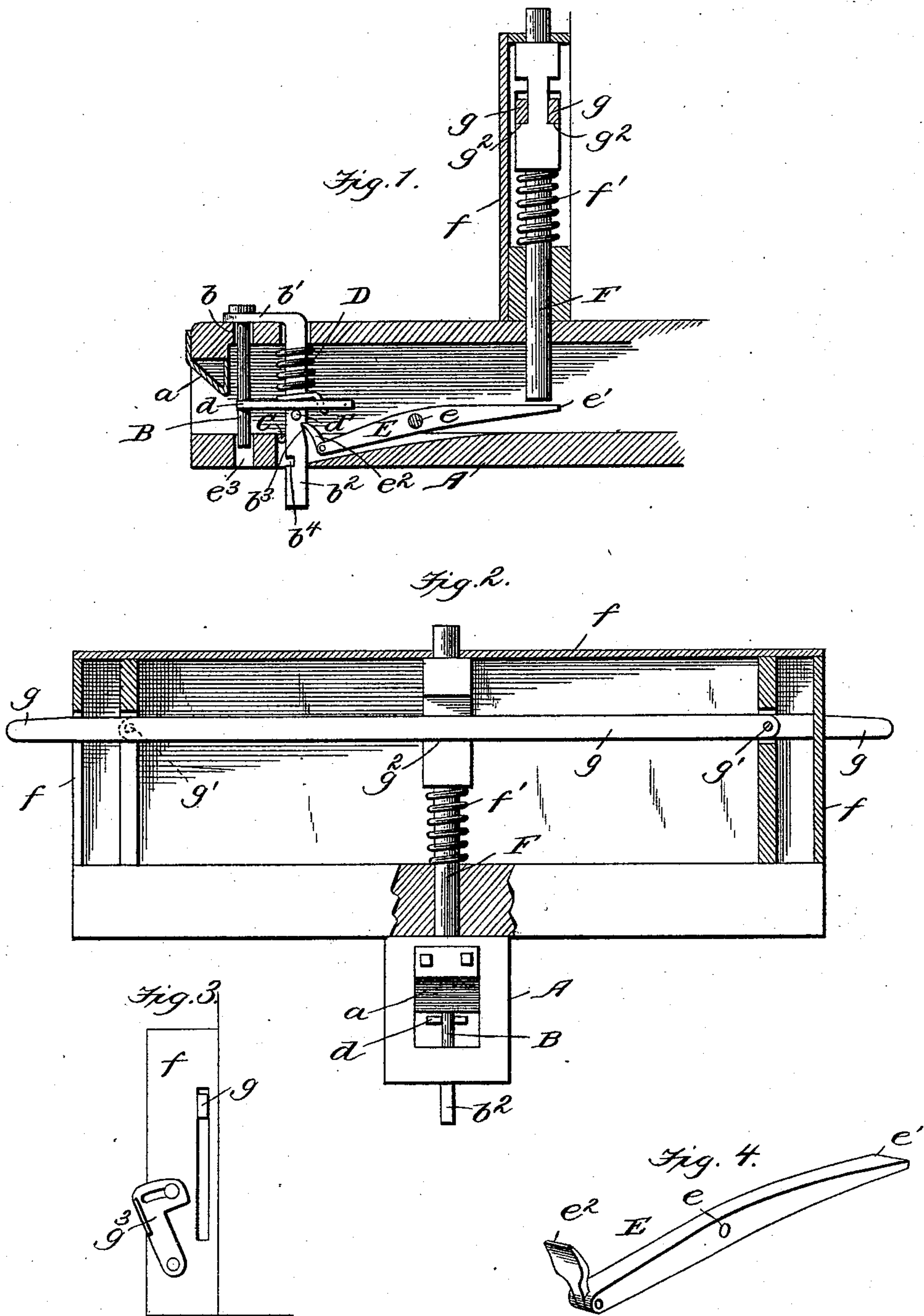


(No Model.)

W. H. EDWARDS.  
CAR COUPLING.

No. 528,466.

Patented Oct. 30, 1894.



Witnesses  
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# UNITED STATES PATENT OFFICE.

WILLIAM H. EDWARDS, OF DU BOIS, NEBRASKA.

## CAR-COUPLING.

SPECIFICATION forming part of Letters Patent No. 528,466, dated October 30, 1894.

Application filed November 14, 1893. Serial No. 409,922. (No model.)

*To all whom it may concern:*

Be it known that I, WILLIAM H. EDWARDS, a citizen of the United States of America, residing at Du Bois, in the county of Pawnee and State of Nebraska, have invented certain new and useful Improvements in Car-Couplings, of which the following is a specification, reference being had therein to the accompanying drawings.

This invention relates to car-couplings and it has for its object the production of simple and highly efficient means whereby the coupling pin can be easily set in position ready for coupling and which will be automatically lowered immediately upon the entrance of a coupling link into the drawhead.

The invention comprises the details of construction, combination and arrangement of parts, substantially as hereinafter fully set forth and particularly pointed out in the claims.

In the accompanying drawings:—Figure 1 is a vertical longitudinal sectional view of a drawhead and its adjuncts provided with my improvements. Fig. 2 is an end view with parts broken away. Figs. 3 and 4 are detail views.

Referring to the drawings A designates the chambered drawhead, and *a* a guard or shield located over the top of the opening for guiding the coupling link.

B is the coupling pin which is projected through an opening *b* in top of drawhead and is secured to the right-angular end *b'* of a rod or bar *b<sup>2</sup>* which is passed through upper and lower openings in the said drawhead. On its rear edge this rod or bar has a notch or shoulder *b<sup>3</sup>* and on its forward edge near the lower end is a notch *b<sup>4</sup>* which is designed to accommodate a cross rod C of the drawhead which holds the rod *b<sup>2</sup>* and the pin elevated, said pin being cleared of the lower portion of the drawhead.

D is a coil spring which encircles the upper part of rod *b<sup>2</sup>* and at its ends bears against the top of the chamber of the drawhead and also against the forked plate *d* fitted on said rod and supported by a cross-pin *d'*. The forks of this plate extend out and overlap the pin B, serving as a guide therefor.

E is a lever fulcrumed at *e* in drawhead A and having its rearward end *e'* widened. To

the forward end of this lever is pivoted a pawl *e<sup>2</sup>* which is designed to engage notch or shoulder *b<sup>3</sup>* and by depressing the rear end of the lever the pin-carrying rod *b<sup>2</sup>* will be elevated, and said rod will be so held by the cross-rod C fitting in notch *b<sup>4</sup>*. A link upon entering the drawhead will strike the rod *b<sup>2</sup>* and disengage the same from cross-rod C, permitting said rod to be lowered by the action of its coiled spring and the coupling pin B passing through the link and into a lower hole *e<sup>3</sup>* in the drawhead the coupling of the cars will be effected.

It is obvious that any suitable means may be employed for operating lever E so as to effect the seating of the pin-carrying rod, but I prefer to operate said lever by a vertical rod F inclosed in a double casing *f*, the lower end of said rod being extended down into the drawhead so as to engage the rear end of the lever. A coil spring *f'* encircling rod F serves to normally hold the same elevated. The rod F may be operated from the sides of the cars by levers *g*, *g*, each of which is fulcrumed at its inner end, as at *g'*, and both of said levers are designed to engage shoulders *g<sup>2</sup>* in said rod. The projecting ends of either lever *g* may be held locked by a catch *g<sup>3</sup>* when it is not desired to couple the cars.

From what has been said it will be seen that I have produced a simple and inexpensive car-coupling, and one that is composed of but few parts and not liable to readily get out of order or be deranged.

I claim as my invention—

1. The combination with a coupling-pin, and a rod connected with the said coupling-pin, of a lever having a pawl to engage with the said rod to operate and elevate the coupling-pin, substantially as described.

2. The combination with a drawhead, of a coupling pin, a spring-pressed rod or bar to which said pin is connected having forward and rearward notches, the cross-rod designed to hold said rod or bar elevated and the lever having a pawl designed to engage the rearward notch of said rod or bar, substantially as set forth.

3. The combination with the drawhead having upper and lower openings, of the pin carrying rod or bar extended through said opening and having a right-angular end, the coupling pin secured to said right angular end, the

forked plate carried by said rod or bar, the coil-spring bearing against said plate and the top of the drawhead, and the lever designed to engage and raise said rod or bar as against  
5 the action of its spring, substantially as set forth.

4. The combination with the drawhead, of the spring-pressed pin-carrying rod or bar, the coupling pin, the lever engaging said rod or  
10 bar, the spring-pressed rod designed to engage and operate said lever, the levers for operating said rod, and the catches for said levers, substantially as set forth.

5. In a car-coupling, the combination of a coupling-pin and a rod having a bent end to  
15 engage and carry the said coupling-pin, and having a notch or stop  $b^3$ , and a lever provided with a pawl to engage with the said stop  $b^3$ , substantially as described and for the purpose  
20 set forth.

In testimony whereof I affix my signature in presence of two witnesses.

WILLIAM H. EDWARDS.

Witnesses:

A. D. EBNER,  
W. J. EMIGH.