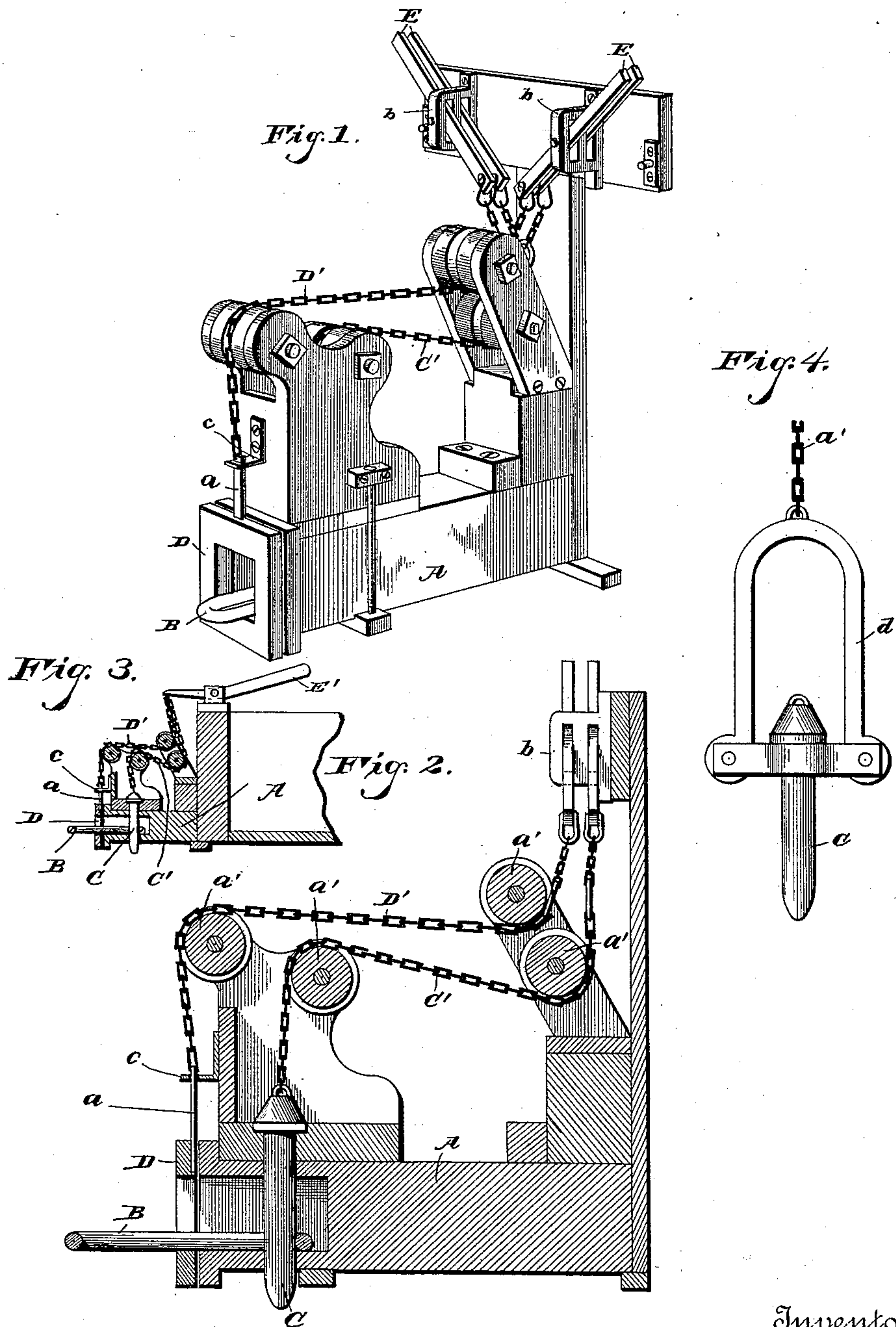


(No Model.)

F. W. SMITH.
CAR COUPLING.

No. 449,974.

Patented Apr. 7, 1891.



Witnesses
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UNITED STATES PATENT OFFICE.

FREDERICK W. SMITH, OF NEW LONDON, CONNECTICUT.

CAR-COUPLING.

SPECIFICATION forming part of Letters Patent No. 449,974, dated April 7, 1891.

Application filed December 6, 1890. Serial No. 373,776. (No model.)

To all whom it may concern:

Be it known that I, FREDERICK W. SMITH, a citizen of the United States of America, residing at New London, in the county of New London and State of Connecticut, 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.

My invention relates to certain improvements in car-couplings; and it consists in the novel construction and combination of parts, as hereinafter fully disclosed.

In the accompanying drawings, Figure 1 is a perspective view of my car-coupling. Fig. 2 is a sectional elevation of the same. Fig. 3 is a modification, as is also Fig. 4.

In carrying out my invention I provide the usual draw-bar A, link B, coupler-pin C, and the improved link-adjuster D, the latter two being supported and actuated by means of the chains C' and D', or other suitable means connected to the upper end of said pin and a stem or arm *a* of the link-adjuster, respectively, and passed over pulleys *a'* *a'*, suitably supported in position, as shown. These chains are connected at their outer ends to four levers E E, fulcrumed in brackets *b b* upon the car, and arranged so as to be conveniently grasped from each side of the car, thus providing for actuating the pin and the link without requiring the train-man to pass between the cars for that purpose, preventing liability of loss of life or limb, or otherwise hurting the train-man or operator.

The link-adjuster, instead of having, as shown, a single opening, may have a series of openings to provide for the reception of the link of the approaching draw-bar, whatever may be its height, and has its stem or arm *a* guided in a bracket *c*, suitably disposed and secured in position. This arrangement serves to hold the link-adjuster against displacement. As the link, as will be seen by reference to the drawings, normally rests upon the adjuster D, it can be adjusted by actu-

ating the chain of the latter so as to accommodate it to the height of the approaching draw-bar in effecting the coupling operation, thus obviating the necessity of the train-man or operator passing in between the cars for that purpose, thus in this respect also preventing danger of loss of life or limb or his being otherwise hurt.

If desired, the coupling-pin, as shown in Fig. 4, may have a yoke connection *d* with its actuating-chain, while, as shown in Fig. 3, in lieu of the levers E it may be used the form of levers E', particularly applicable upon a flat or platform car.

It is also observed that this invention is adapted for coupling with a draw-bar of the ordinary type and using the ordinary pin and link, and can be readily and cheaply substituted for the latter or applied in building new cars.

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

1. In a car-coupler, the link-adjuster disposed in front of the draw-bar and the coupling-pin for insertion in the link, in connection with the chains and pulleys and levers projecting in opposite directions, substantially as shown, and for the purpose described.

2. In a car-coupling, the link-adjuster, the coupling-pin and link, the chains mounted on pulleys, and the levers fulcrumed in brackets to be grasped on each side of the car, substantially as shown and described.

3. The car-coupler having the link-adjuster and its guiding appliances and the coupling-pin, in combination with the mechanism including chains, pulleys, and levers suitably fulcrumed in position, substantially as set forth.

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

FREDERICK W. SMITH.

Witnesses:

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