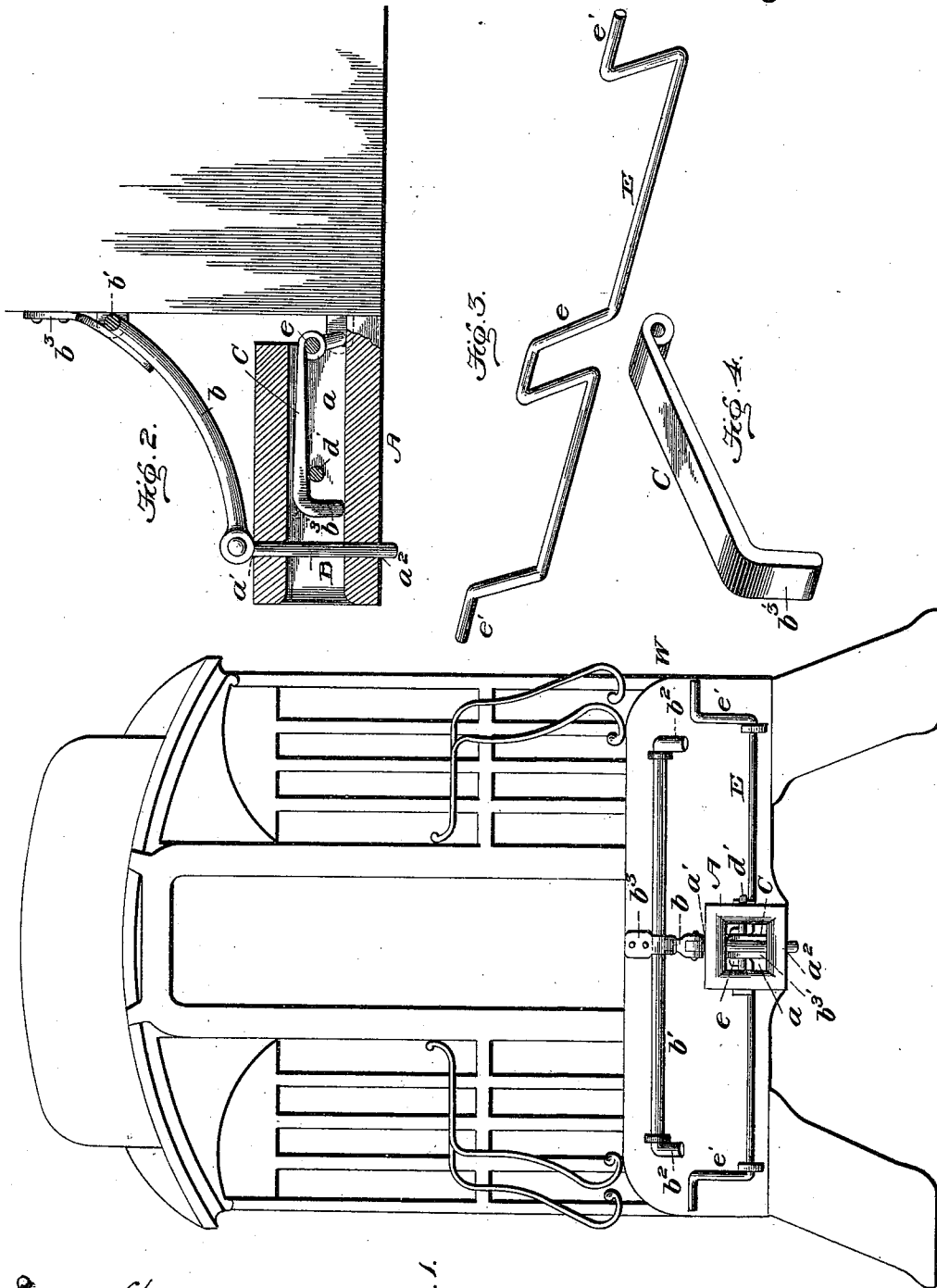


(No Model.)

A. P. REDMON.
CAR COUPLING.

No. 544,194.

Patented Aug. 6, 1895.



Witnesses:
Wm. F. Ashie
Mr. S. Dodge.

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Atty

UNITED STATES PATENT OFFICE.

ALFRED P. REDMON, OF ADRIAN, KANSAS.

CAR-COUPLING.

SPECIFICATION forming part of Letters Patent No. 544,194, dated August 6, 1895.

Application filed May 10, 1895. Serial No. 548,847. (No model.)

To all whom it may concern:

Be it known that I, ALFRED P. REDMON, of Adrian, in the county of Jackson and State of Kansas, have invented certain new and useful Improvements in Car-Couplings; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

This invention contemplates new and useful improvements in car-couplers, and has for its object the production of an exceedingly simple and inexpensive device of this kind by means of which the pins will be quickly returned to and held in their normal position and the links can be readily and easily ejected from the draw-heads.

A further object is to simplify the construction, whereby the parts employed are reduced to a minimum and are not liable to readily get out of order or be deranged.

To these ends the invention comprises the novel features and construction and the detailed construction and arrangement of parts, substantially as hereinafter fully set forth, and particularly pointed out in the claim.

In the accompanying drawings, Figure 1 is an end view showing a portion of a car-frame constructed with my improved coupling. Fig. 2 is a central vertical longitudinal sectional view. Figs. 3 and 4 are detailed.

Referring to the drawings, A designates the draw-head, having an inner chamber *a* open at both ends.

In the top and bottom of the draw-head, near the forward end thereof, are coincident holes or openings *a'* *a*² to accommodate the coupling-pin.

B designates the coupling-pin, which at its upper end is pivotally secured to the outer end of the crank-arm *b*, which extends centrally from a rock-shaft *b'*, journaled on the forward end of car W, the ends of said rock-shaft being cranked, as at *b*², whereby the same can be readily operated. A plate-spring *b*³, attached to the end of the car, bears on this crank-arm *b*. The tension thereof serves to constantly hold the coupling-pin lowered in the holes *a'* *a*² of the draw-heads. To raise this pin the operator turns either crank end of the shaft *b'*, and upon releasing his hold thereon the spring bearing on said shaft im-

mediately returns said coupling-pin to its normal position.

C is a link-ejector and pin-holder. It consists of a substantially-L-shaped bar located within the chamber *a* of the draw-head, and having its lower downwardly-bent end *b*³ resting on the bottom of said chamber. A cross-rod *d'*, extending through the chamber *a*, acts as a guide for the ejector and holds the same in an approximately horizontal position, the outer end thereof being in a vertical plane parallel with the end of the draw-head. At its inner end the bar of the ejector is connected to the crank portion *e* of an operating-shaft E, journaled on the end of the car. The ends of this shaft are bent or cranked and provided with handles *e'*, by which the shaft can be readily operated to effect the forward or rearward movement of the ejector. In operating this crank-shaft so as to cause the cranked portion thereof to move inward in the chamber *a* in the draw-head the ejector is moved forward, and the coupling-pin having been previously elevated out of the way, the ejector forces the uncoupled link from the draw-head and supports the pin, which latter rests thereon. The outer downwardly-bent end of the ejector also serves, in part, to relieve the concussion caused by the coupling of the cars, since the links of the approaching draw-head will strike against said end of the ejector and will receive the force of the blow, and thus reduce the force of the blow consequent upon the coupling of two cars. It is not necessary to operate the shaft *b* in the coupling of the cars, since, as stated, the approaching link will force the ejector rearward and allow the coupling-pin to drop, under the action of spring *b*³. As soon as the link enters the chamber of the draw-head, the spring causes the immediate lowering of the coupling-pin, and the latter will pass through the link into the lower hole *a*² of the draw-head and effect the complete union or coupling.

In uncoupling cars the operator first elevates the pin and then turns the operating-shaft *e*, so as to cause the ejector to force the link outward and support the pin. The cross-rod in the chamber guides the ejector and serves to always hold the same in its position.

The advantages of my invention are appar-

ent. It will be observed that I have produced an exceedingly simple and inexpensive coupling, by means of which cars can be readily and easily coupled together. The parts, being simple in construction, are not liable to get out of order or be deranged.

I claim as my invention—

The herein described car coupling comprising the drawhead having a chamber open at its ends, upper and lower holes or openings, a cross-rod located in said chamber, a coupling pin, a shaft having a central crank arm to the outer end of which said pin is pivotally connected, a spring acting on said crank arm, a

crank shaft journaled to the forward end of the car having a central crank portion, outer crank operating handle-ends, and an ejector having a forward flanged or downwardly extended portion, said ejector being connected at its rear end to said crank portion of said latter shaft, substantially as set forth.

In testimony whereof I have signed this specification in the presence of two subscribing witnesses.

ALFRED P. REDMON.

Witnesses:

JAMES MILLIGAN,
ALEX. GIFFEN.