

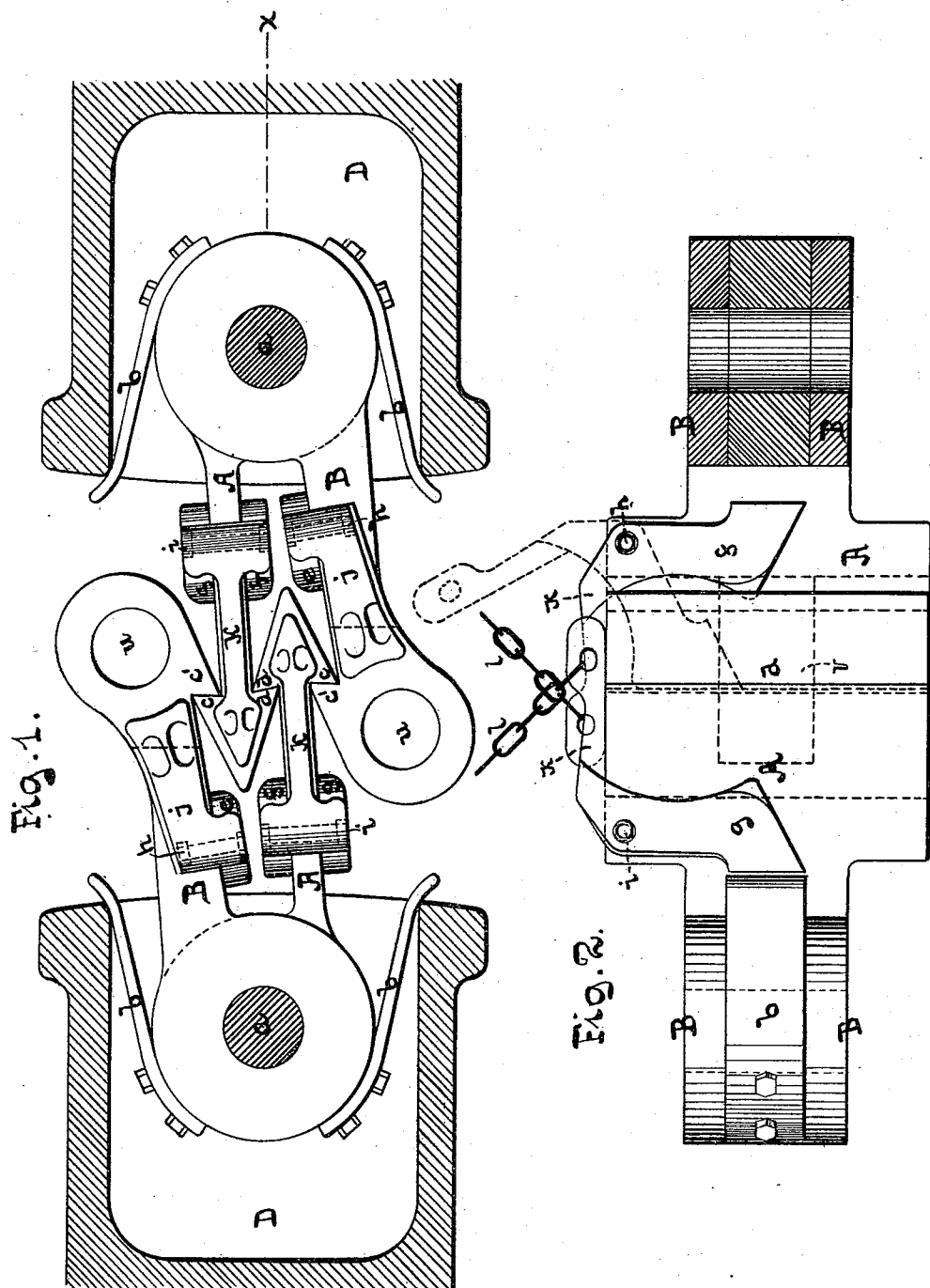
(No Model.)

2 Sheets—Sheet 1.

F. W. JOST.
CAR COUPLING.

No. 470,198.

Patented Mar. 8, 1892.



WITNESSES:

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Joseph Elias

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(No Model.)

2 Sheets—Sheet 2.

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Fig. 4.

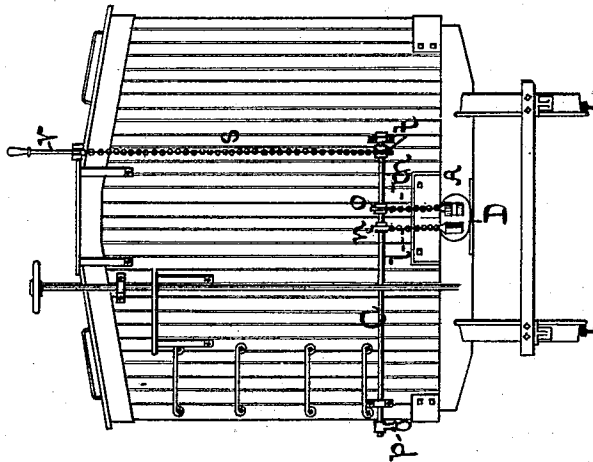
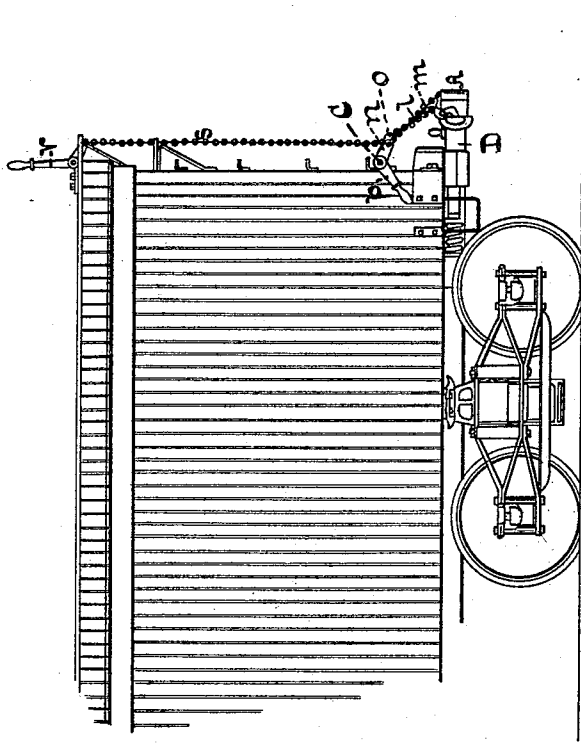


Fig. 3.



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UNITED STATES PATENT OFFICE.

FREDERIC W. JOST, OF JERSEY CITY, NEW JERSEY.

CAR-COUPLING.

SPECIFICATION forming part of Letters Patent No. 470,198, dated March 8, 1892.

Application filed May 29, 1891. Serial No. 394,474. (No model.)

To all whom it may concern:

Be it known that I, FREDERIC W. JOST, a citizen of the United States, and a resident of Jersey City, in the county of Hudson and State of New Jersey, have invented certain new and useful Improvements in Car-Couplings, of which the following is a specification.

My invention has reference to improvements in car-couplings; and it consists in certain novel features of construction, as fully pointed out in the following specification and claims and illustrated in the accompanying drawings, in which—

Figure 1 represents a sectional plan of the entire coupling as applied to the draw-heads of the cars. Fig. 2 is a vertical section in the plane $x x$, Fig. 1. Fig. 3 is a side elevation of a car with the coupling applied, said figure being drawn to a smaller scale than the preceding figures. Fig. 4 is an end elevation of the same.

Similar letters indicate corresponding parts throughout the several views.

In the drawings, referring at present to Figs. 1 and 2, the letters A and B designate the respective jaws of the coupling, which are hinged together by a suitable pin a .

In practice the coupling is made to fit into the ordinary draw-head D, the coupling-pin then answering both as a pivot for the jaws of the coupling and as means for securing the latter to the draw-head. Suitable flat springs, as $b b$, serve to hold the jaws A and B together, said springs bearing against the walls of the draw-head. However, other suitable means could be employed to the same end.

The jaw A of the coupling is provided with barbs c and d on opposite sides thereof, while the jaw B is provided with but one barb c' , arranged to face the barb d on the jaw A.

In Figs. 1 and 2 I have shown the couplings united, and to uncouple the same they are each provided with a set of cams e, f , and g , arranged to swing in vertical planes and engage with the barbs of the couplings to force the jaws apart. In this example I have shown the cam e pivoted by a bolt h to the respective jaw B and the cams f and g united and pivoted by bolt i to the jaw A. However, they could be arranged in any other manner suitable for the purpose. To swing

the cams e, f , and g upward about their pivots they are formed with horizontal arms $j k$, which can be connected by means of chains l and m with arms n and o , projecting from a horizontal rock-shaft C, having suitable bearings on the body of the car. (See Figs. 3 and 4.) This rock-shaft can be turned from the side of the car by means of an arm p , projecting from the rock-shaft C within easy reach of the train-man. If desired, the couplings can also be reached from the top of the car by means of the hand or foot lever r , connected by a chain s with an arm t on the rock-shaft C, or by any other convenient means. The cams e, f , and g are returned to their normal position by the arms $j k$, which are made heavy at their outer ends for this purpose. The jaw B, Figs. 1 and 2, is bored out vertically, as at u , and provided with a horizontal socket, as v , so that in case of breakage of one of the couplings or the meeting with a car not provided with the same coupling the cars can be coupled by means of a pin and link.

It is evident that my improved coupling can be applied to a car without necessitating alterations thereof, since it is fitted directly into the draw-head, as described, and the coupling itself being simple and strong in its construction is not liable to get out of order or to give way under severe strains.

What I claim as new, and desire to secure by Letters Patent, is—

1. A car-coupling consisting of two hinged jaws constructed and arranged as described, in combination with cams adapted to swing in vertical planes and provided with outwardly-extending arms arranged above the jaws, and springs for holding the jaws together, substantially as described.

2. A car-coupling consisting of two hinged jaws constructed as described, in combination with the cams adapted to swing in vertical planes, springs for holding the jaws together, and the weighted arms for returning the cams to their normal position, substantially as described.

3. The combination, with the coupling having the uncoupling-cams e, f , and g and the arms $j k$ thereof, of the rock-shaft C, arms n, o , chains $l m$, and arm p for operating said

cams from the side of the car, substantially as described.

4. The combination, with the coupling having the uncoupling-cams *e*, *f*, and *g* and arms
5 *j* *k* thereof, of the rock-shaft *C*, arms *n*, *o*, and *t* thereon, chains *l*, *m*, and *s*, arm *p*, and lever *r* for operating the said cams, substantially as described.

In testimony that I claim the foregoing as my invention I have signed my name, in presence of two witnesses, this 15th day of May, 1891.

FREDERIC W. JOST.

Witnesses:

W. H. BRISTOL,

A. FABER DU FAUR, Jr.