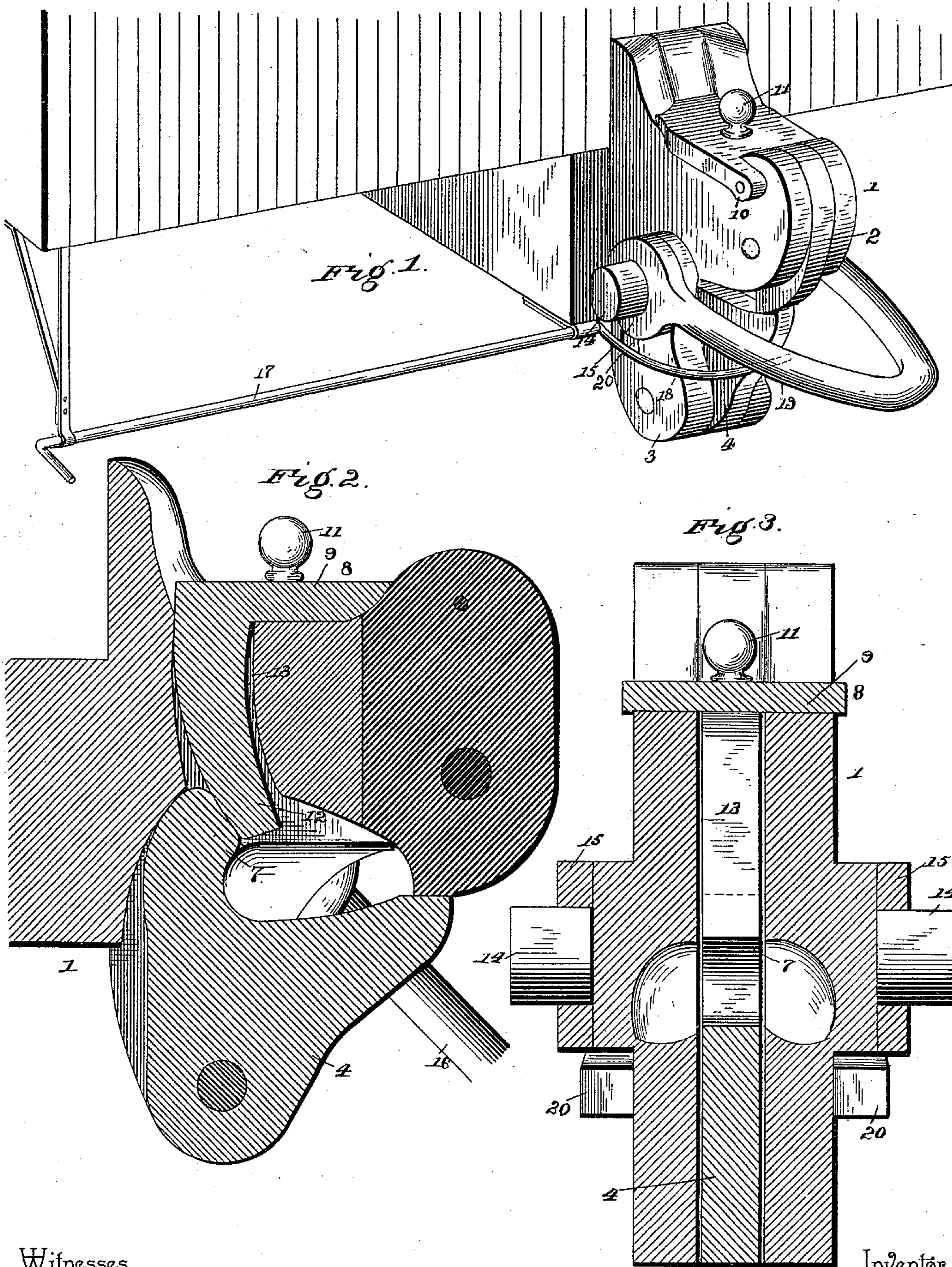


(No Model.)

J. L. MATSON.
CAR COUPLING.

No. 486,193.

Patented Nov. 15, 1892.



Witnesses

J. M. Johnson
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By *his* Attorneys,

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UNITED STATES PATENT OFFICE.

JEPHTHA L. MATSON, OF DUNBARTON, WISCONSIN.

CAR-COUPLING.

SPECIFICATION forming part of Letters Patent No. 486,193, dated November 15, 1892.

Application filed May 18, 1892. Serial No. 433,445. (No model.)

To all whom it may concern:

Be it known that I, JEPHTHA L. MATSON, a citizen of the United States, residing at Dunbarton, in the county of La Fayette and State of Wisconsin, have invented a new and useful Car-Coupling, of which the following is a specification.

The invention relates to improvements in car-couplings.

The object of the present invention is to simplify and improve the construction of car-couplings, to provide one which will couple automatically, and which may be used in connection with the ordinary pin-and-link couplings, and which may be readily uncoupled.

A further object of the invention is to enable a link to be readily guided into the mouth of a draw-head.

The invention consists in the construction and novel combination and arrangement of parts hereinafter fully described, illustrated in the accompanying drawings, and pointed out in the claims hereto appended.

In the drawings, Figure 1 is a perspective view of a car-coupling constructed in accordance with this invention. Fig. 2 is a longitudinal sectional view. Fig. 3 is a transverse sectional view.

Like numerals of reference indicate corresponding parts in all the figures of the drawings.

1 designates a draw-head having its front end bifurcated and provided with a stationary depending hook 2 and having pivotally mounted in depending portions 3 a catch 4, adapted to swing forward to receive a link and to move rearward to carry the link in engagement with the depending hook and to close the mouth thereof. The pivoted catch 4 has its upper edge curved, and when thrown forward it engages the depending stationary hook and presents an inclined face to receive a link which engages an extension 7 of the catch and moves the same rearward, thereby lifting the latch 8. The latch 8 consists of a plate 9, having projecting ears 10, pivoted on opposite sides of the draw-head and provided with a knob 11 and a curved arm 12, depending from the rear end of the plate and arranged within a vertical opening 13 of the draw-head and adapted to drop in front of the extensions 7 of the catch to lock the latter.

The draw-head is provided at opposite sides with laterally-projecting trunnions 14, on which are journaled the ends 15 of a U-shaped link 16, which is provided with eyes to receive the trunnions. The link is raised by a rock-shaft 17, arranged beneath the car and having its inner end journaled on one of the side timbers 21 of the coupling and having its outer end journaled in a hanger 22 and is provided with a handle. The inner end of the rock-shaft is provided with a curved arm 18, which has its outer end bent inward beneath the link and adapted to lift the latter to direct into a draw-head.

The link of one of two coupled cars is not in use and hangs in a vertical position and bears against laterally-extending lugs 20, which prevents the links swinging inward and vibrating.

It will be seen that the car-coupling is simple and comparatively inexpensive in construction, that it is capable of coupling automatically and of being readily uncoupled, and that it may be employed in connection with the ordinary form of draw-head. The knob of the latch may be connected with any suitable means for uncoupling the cars from the tops or the sides thereof, or may be lifted by hand like an ordinary car-pin. The draw-head is hollowed out somewhat back of the hook, and thereby forms a substantial throat to receive the link of another draw-head, and the curved upper end of the catch conforms to the configuration of the draw-head. The top of the draw-head is provided with a vertical extension or stop arranged to engage the timbers of a car to prevent the draw-head moving inward too far.

What I claim is—

1. In a car-coupling, the combination of a draw-head provided with a depending stationary hook, a pivoted catch arranged below the hook and adapted to receive a link and to close the mouth of the hook to confine a link, and a latch arranged to lock the catch, substantially as described.

2. In a car-coupling, the combination of a draw-head having its front end bifurcated and provided with depending extensions, a hook mounted in the bifurcation and depending therefrom, a catch pivotally mounted in the depending extension and arranged be-

neath the hook and having an extension and adapted to swing forward to present an inclined face to guide a link into the hook, and a latch arranged to engage the extension of
5 the catch, substantially as described.

3. In a car-coupling, the combination of a draw-head provided with a vertical opening and having lateral trunnions, a U-shaped link journaled on the trunnions, a depending
10 hook arranged at the front of the draw-head, a pivoted catch mounted below the hook and adapted to convey a link into the mouth of the same, and a latch comprising a plate hinged to the draw-head and a depending curved
15 arm arranged in the vertical opening of the draw-head and adapted to engage the catch, substantially as described.

4. In a car-coupling, the combination of a

draw-head provided with a vertical opening and having lateral trunnions, a U-shaped 20 link journaled on the trunnions, a hook depending from the front of the draw-head, a pivoted catch mounted below the hook, a latch having an arm arranged in the vertical opening and adapted to engage the catch, and a 25 rock-shaft having a curved arm arranged to lift the link, substantially as and for the purpose described.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in 30 the presence of two witnesses.

JEPHTHA L. MATSON.

Witnesses:

A. L. MATSON,
E. W. LAIRD.