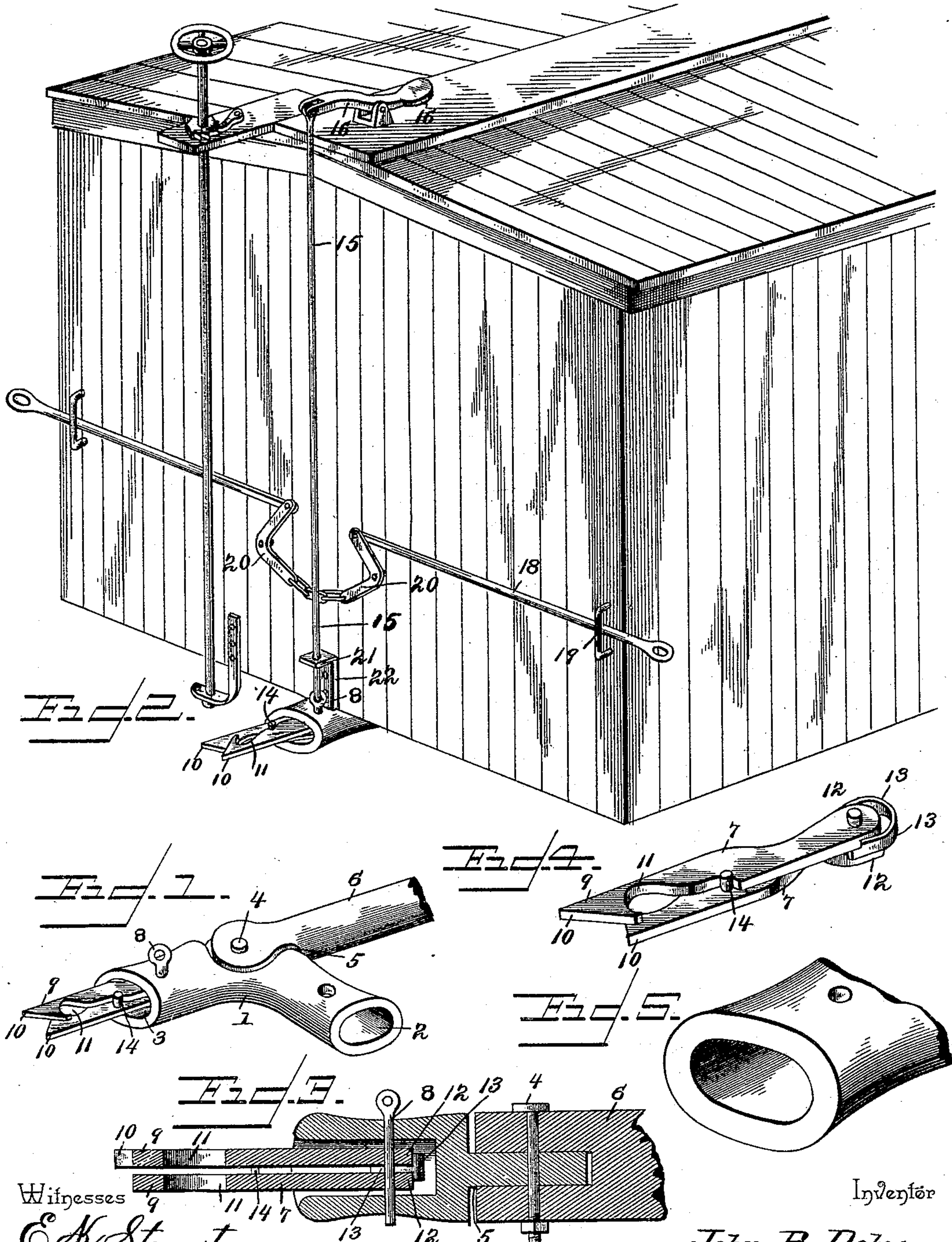


(No Model.)

J. B. DOBY.
CAR COUPLING.

No. 495,152.

Patented Apr. 11, 1893.



Witnesses

E. H. Stewart

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UNITED STATES PATENT OFFICE.

JOHN B. DOBY, OF MACEY, ARKANSAS.

CAR-COUPLING.

SPECIFICATION forming part of Letters Patent No. 495,152, dated April 11, 1893.

Application filed August 24, 1892. Serial No. 443,985. (No model.)

To all whom it may concern:

Be it known that I, JOHN B. DOBY, a citizen of the United States, residing at Macey, in the county of Craighead and State of Arkansas, 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 will be easily uncoupled, and to enable the ordinary pin and link to be readily employed, and to enable cars provided with the improved coupling to be readily coupled with those having the ordinary pin and link coupling.

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 and designed to be employed in front of an engine. Fig. 2 is a similar view of a car coupling adapted to be used on a car. Fig. 3 is a sectional view of the form shown in Fig. 1. Fig. 4 is a detail perspective view of the removable spring actuated jaws. Fig. 5 is a perspective view of a draw-head, the spring jaws being removed.

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

1 designates an L-shaped draw-head having mouths 2 and 3, and having its angle recessed and pivoted by a pin 4 in a bifurcation 5 of the outer end of a draw-bar 6 designed to be used at the front of a locomotive in the ordinary manner. Spring actuated jaws 7 are pivoted by a coupling pin 8 in the mouth 3, and are detachable, but to avoid removing them on an engine, the additional head is provided so that by turning the L-shaped draw-head on its pivot, the spring jaws may be brought in position for coupling for the other portion of the draw-head may be arranged for use so as to receive the ordinary pin and link coupling, or to receive the spring jaws of a car draw-head 9.

The spring jaws are adapted to receive and

engage a coupling pin, and are provided with arrow heads 10 and recesses 11 formed in the shoulders of the head at opposite sides of the jaws. The rear ends 12 of the jaws are enlarged and are connected by a spring 13, and are arranged on each other as shown, whereby when the jaws are open they cross each other; and one of the jaws are provided with a stop 14 which holds the jaws together when coupled. The spring 13 is curved around the inner ends of the jaws, and has one end secured to the shank of one jaw, and its other end secured to the other jaw, and when the jaws are separated the ends of the spring are drawn together, thereby compressing the spring so that the latter will return the jaws to their normal positions.

The coupling pin is provided in its head with a perforation, and has attached to it, when used in connection with a car, a rod 15 which extends from the draw-head to the top of the car and is connected with a treadle 16 designed to be arranged adjacent to the vertical brake-shaft of the car, so as to be in convenient reach of a brakeman. By depressing the treadle, the coupling-pin is raised sufficiently so as to allow the jaws to be withdrawn. The spring actuated jaws are adapted to engage a coupling pin in the mouth of the draw-head from which the jaws have been removed, and by having the spring jaws removable, they may be readily taken from one draw-head and placed in another.

The coupling is operated from the sides of a car by horizontally disposed rods 18 which have their outer ends arranged in keepers 19 and terminating in handle loops, and which have their inner ends connected to upper arms of bell-crank levers 20. The bell-crank levers 20 are fulcrumed at their angles on the car and are disposed on opposite sides of the rod 15, and have their lower arms connected flexibly with the said rod 15, whereby when the horizontal rods 18 are pulled outward, the lower arm of the bell-crank levers will be raised, thereby lifting the coupling pin. The vertical movement of the coupling pin is limited by a horizontal arm 21 of a plate 22 which is secured to the car; and the said arm 21 is perforated to receive the rods 15, and is disposed directly over the head of the coupling pin and is arranged to form a stop for the same

to prevent the coupling pin leaving the draw-head.

What I claim is—

1. The combination with a car, of a draw-
5 head having a coupling pin perforation, the removable spring actuated jaws arranged in the draw-head and provided at their inner ends with registering perforations, a coupling pin arranged in the perforations of the draw-
10 head and the jaws and securing the latter in the former, a vertically disposed rod extending to the top of the car and connected with the coupling pin, the opposite bell-crank levers disposed on opposite sides of the rod and
15 having their lower arms connected therewith, and the laterally extending rods secured to the upper arms of the bell-crank levers and

terminating in handles at their outer ends arranged at the sides of the car, substantially as described. 20

2. In a car coupling, the combination of a draw-bar, an L-shaped draw-head pivoted at its angle to the draw-bar and provided in each arm or branch with a longitudinal cavity or mouth, and spring actuated jaws detachably 25 secured within one of the mouths, substantially as described.

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

JOHN B. DOBY.

Witnesses:

ALLEN SPRINGER,
J. H. HICKMAN.