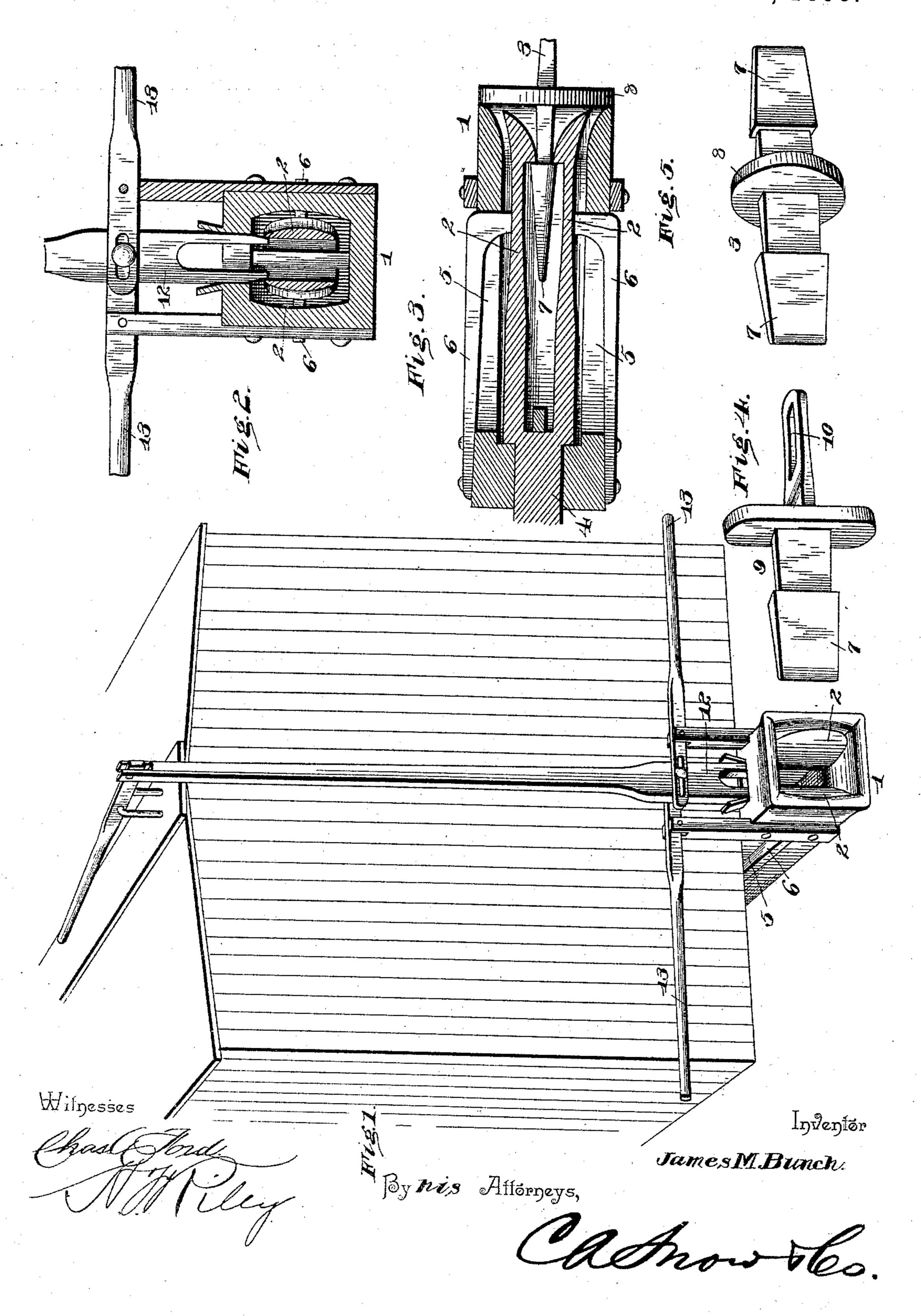
## J. M. BUNCH. CAR COUPLING.

No. 489,924,

Patented Jan. 17, 1893.



## UNITED STATES PATENT OFFICE.

JAMES M. BUNCH, OF WILLOW SPRINGS, MISSOURI, ASSIGNOR OF ONE-HALF TO GEORGE W. AERY, OF SAME PLACE.

## CAR-COUPLING.

SPECIFICATION forming part of Letters Patent No. 489,924, dated January 17, 1893.

Application filed July 15, 1892. Serial No. 440, 159. (No model.)

To all whom it may concern:

Be it known that I, James M. Bunch, a citizen of the United States, residing at Willow Springs, in the county of Howell and State of Missouri, 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 improve the construction of arrow headed link and spring jaw car couplings, and to enable the same to be readily uncoupled without necessitating a person going between cars, the operation of coupling being automatic.

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

20 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 transverse sectional view. Fig. 3 is a horizontal sectional view. Fig. 4 is a detail perspective view of another form of link from that shown in Fig. 2. Fig. 5 is a detail perspective view of the link shown in Fig. 2.

Like numerals of reference indicate corre-30 sponding parts in all the figures of the draw-

ings.

1 designates a draw head having arranged in its longitudinal openings oppositely disposed spring jaws 2 having their inner op-35 posed faces shouldered and adapted to engage an arrow-headed link 3. The spring actuated jaws are formed integral with the shank 4, and are resilient each jaw being a spring. The draw-head is provided in oppo-40 site sides with longitudinal slots 5 in which are arranged springs 6, which are disposed longitudinally of the draw-head and have their rear ends secured to the same, and have their front ends engaging the spring jaws 45 through the slots and strengthing and supporting the same. The link 3 is provided at each end with an arrow-head 7 which is engaged by the said jaws, and the link is pro-

vided at its center with a transverse stop 8, which may be cylindrical as shown in the 50 link 3 or which may be rectangular as illustrated in Fig. 4 which shows a link 9 having a slot 10 at one end adapted to be engaged by the pin of an ordinary draw-head so that a car having the improved coupling herein 55 shown and described may be coupled with the ordinary pin and link coupling. The spring jaws are spread for uncoupling by a vertically movable bifurcated wedge 12, which is adapted in descending to straddle the link and 60 open the jaws. The vertically movable web is actuated by horizontal levers 13 which extend to the sides of the car and by an upwardly extending lever which is fulcrumed on the top of the car and is adapted to be op- 65 erated thereat.

It will be seen that the car coupling is simple and inexpensive in construction, that it is automatic in coupling, and may be readily uncoupled either from the top or sides of a 70 car. The horizontal levers 13 are fulcrumed in bifurcations of vertically disposed arms 15 arranged at opposite sides of the draw-head. The vertically movable wedge is provided with an upwardly extending stem or bar to 75 the upper end of which is pivoted the lever which is fulcrumed on the top of the car.

What I claim is—

1. In a car coupling, the combination of a draw-head, spring jaws arranged within the 80 same, and a vertically movable wedge adapted to spread the jaws and provided in its lower end with a bifurcation, whereby the wedge is adapted to straddle the link in opening the jaws, substantially as described.

2. In a car coupling, the combination of a draw-head, spring jaws arranged within the same, a vertically movable wedge adapted to enter between the jaws to spread the same and being bifurcated to straddle the link, and 90 levers fulcrumed intermediate of their ends, and having their inner ends connected with the wedge and adapted to actuate the same, substantially as described.

3. In a car coupling, the combination of a 95 draw-head provided in its sides with longi-

tudinal slots, spring jaws arranged with the draw-head, springs secured to the sides of the draw head and engaging the spring jaws through said slots, and a vertically movable wedge adapted to spread the jaws, 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.

JAMES M. BUNCH.

Witnesses:

R. F. Moffitt,

I. Webber.