

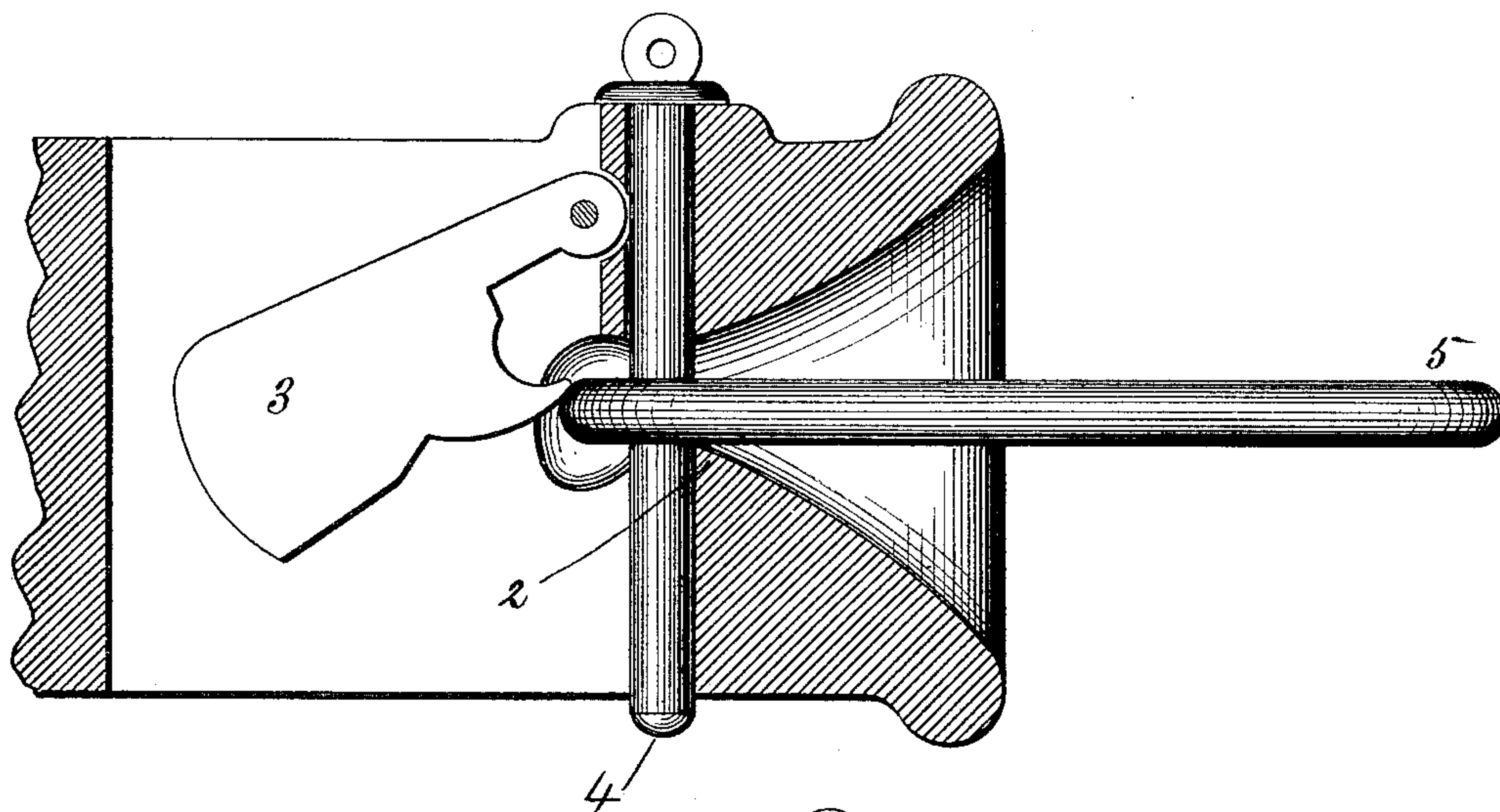
(No Model.)

E. W. CADY.  
CAR COUPLING.

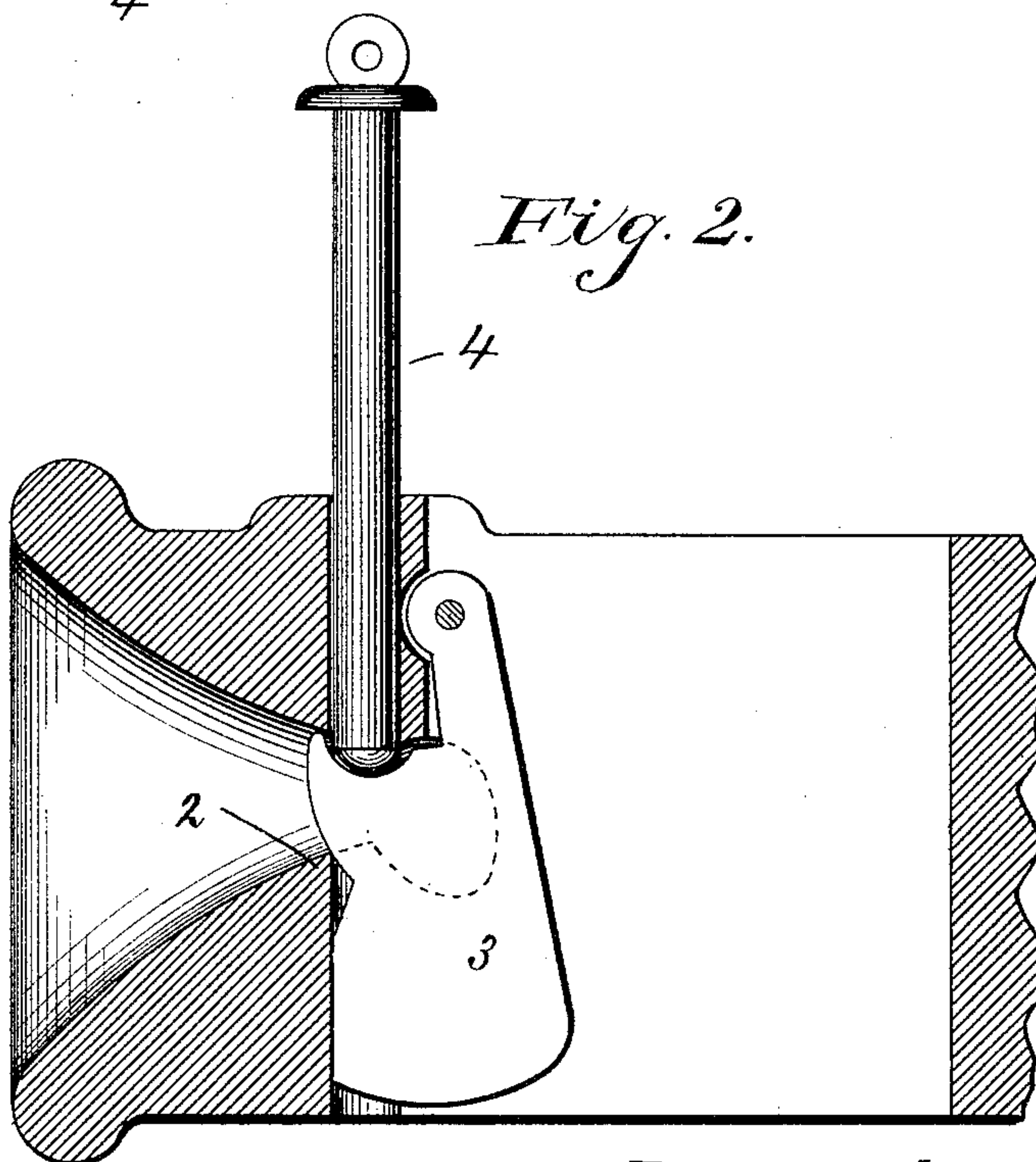
No. 405,993.

Patented June 25, 1889.

*Fig. 1.*



*Fig. 2.*



*Witnesses:*  
*Ferry Phil*  
*D. Cleopser*

*Inventor:*  
*Elisha W. Cady*

# UNITED STATES PATENT OFFICE.

ELISHA W. CADY, OF CHICAGO, ILLINOIS, ASSIGNOR OF ONE-HALF TO DANIEL C. COOPER, OF SAME PLACE.

## CAR-COUPLING.

SPECIFICATION forming part of Letters Patent No. 405,993, dated June 25, 1889.

Application filed February 11, 1889. Serial No. 299,535. (No model.)

*To all whom it may concern:*

Be it known that I, ELISHA W. CADY, of the city of Chicago, county of Cook, and State of Illinois, and a citizen of the United States, have invented a new and useful Machine for Coupling Cars, of which the following is a specification.

My invention relates to improvements in car-couplers, and the objects of my improvements are, first, to provide a bell-shaped buffer-head to guide the link to the pin; second, a swinging pallet to hold the pin up until the link presses it back and lets the pin fall through the link and couple the cars; third, the narrow throat of the buffer, which acts as a fulcrum, over which the link balances and is held in any position, high or low, as may be required, by the peculiar shape of the pallet. I attain those objects by the mechanism illustrated in the accompanying drawings, in which—

Figure 1 shows the pallet holding up the link, and Fig. 2 shows the pin resting on the pallet.

5 is the link. 4 is the pin. 3 is the pallet, and 2 is the fulcrum on which the link can oscillate.

First I use the bell-shape buffer-head to guide the link to the pin. Then I use a swinging pallet to hold the pin up until the link presses the pallet back and lets the pin fall through the link and couple the cars.

The buffer is made with a narrow throat at

the pin-hole, which helps to strengthen the pin and forms a fulcrum over which the link balances when raising or lowering the outer end, and a larger cavity back of the pin-hole to give room for the link to work up and down, and with a recess back of pallet to allow it to swing back out of the way, so the link can work up and down when the cars are coupled and running on rough road.

The pallet is made with a cup, in which the pin sets before coupling, and cannot be easily displaced by the backing and bumping of the cars when coupling. The front of the pallet is made of an eccentric shape, so that when the link is set to receive another car the pallet will press down on the inner end of the link and hold it at any angle desired, but not rigidly, but will yield to greater pressure, all as substantially set forth.

I am aware that prior to my invention self-car couplers have been made with swing-pallets to hold the pin and with link-guides to carry the link. I therefore do not claim such a combination, broadly; but

What I do claim is—

The combination of the draw-head having a fulcrum 2 and a pallet 3, provided with a cup-shaped or concave seat, all substantially as described.

ELISHA W. CADY.

Witnesses:

DANIEL C. COOPER,  
HENRY WEIL.