(No Model.)

J. S. OWEN & G. L. SNIDER.

CAR COUPLING.

No. 265,977. Patented Oct. 17, 1882.

Fig. 1.

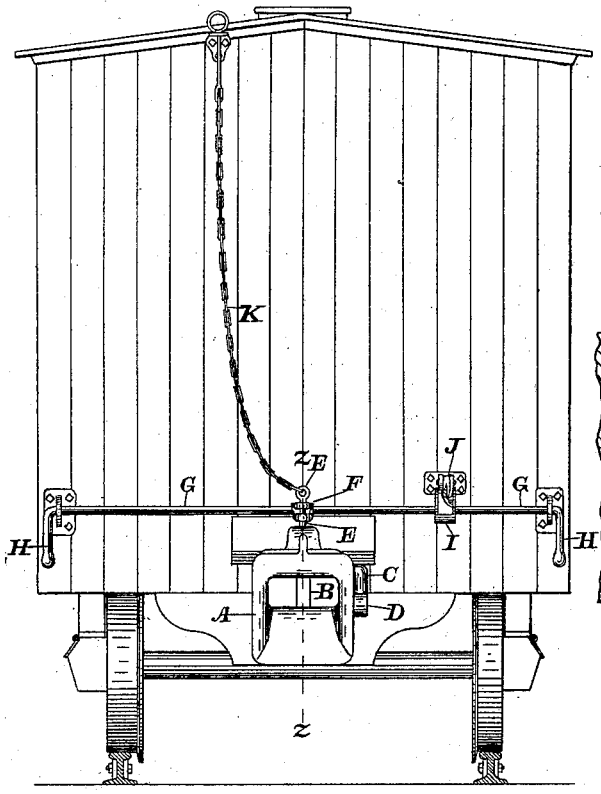


Fig. 3.

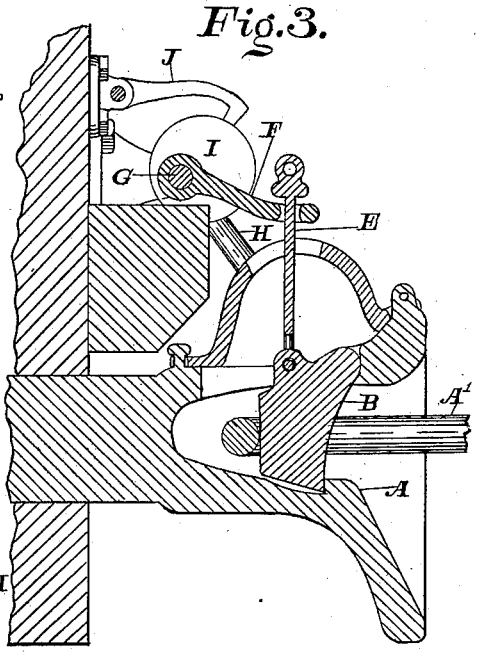


Fig. 4.

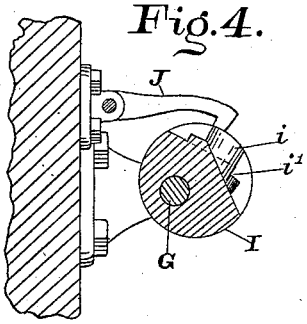


Fig. 2.

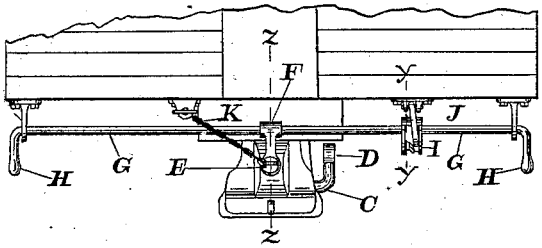


Fig. 5.

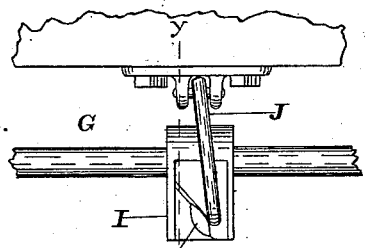
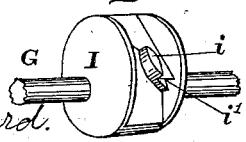


Fig. 6.



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JOHN S. OWEN AND GEORGE L. SNIDER, OF NORTH INDIANAPOLIS, IND.

CAR-COUPLING.

SPECIFICATION forming part of Letters Patent No. 265,977, dated October 17, 1882.

Application filed March 7, 1882. (No model.)

To all whom it may concern:

Be it known that we, JOHN S. OWEN and GEORGE L. SNIDER, of the town of North Indianapolis, county of Marion, and State of Indiana, have invented certain new and useful Improvements in Car-Couplings, of which the following is a specification.

Our said invention consists in a peculiar means of operating the engaging portion of a car-coupling, whereby it can be uncoupled, held in uncoupled position, disengaged, and generally manipulated in all ordinary ways without the necessity of the operator passing between the cars or incurring any of the usual danger attendant upon the coupling of cars, all as will be hereinafter more specifically described.

Referring to the accompanying drawings, which are made a part hereof, and on which similar letters of reference indicate similar parts, Figure 1 is an end elevation of a car whereon are our improvements; Fig. 2, a top or plan view of so much of the same as is necessary to include said improvements; Fig. 3, a central vertical section on an enlarged scale on the dotted line *z z;* Fig. 4, a vertical section on the dotted line *y y;* Fig. 5, a top or plan view of the parts shown in Fig. 4; and Fig. 6, a perspective view of a peculiarly-formed catch-wheel, which is a leading feature in our present invention.

In said drawings, the portions marked A represent the casting forming the draw-head of the coupling; B, the pivoted catch-pin; C, the pivot-shaft therefor; D, a weight thereon; E, a rod for lifting the catch-pin B; F, an arm whereby said rod may be lifted; G, a shaft running across the end of the car, on which said lever is mounted; H H, hand-levers upon the ends of the shaft G; I, a catch-wheel of peculiar form, mounted upon the shaft G; J, a pawl which is adapted to engage with said catch-wheel, and K a chain or rod by which the rod E and catch-pin B can be operated from the top of a box-car.

The several parts, A, B, C, D, and E, are similar to the corresponding parts in our Patent No. 251,130, dated December 20, 1881, upon which this present invention is an improvement.

The arm F is capable of being operated by the shaft G to raise the rod E, and with it the catch-pin B, when it is desired to disengage the latter from the coupling-link A'.

The shaft G extends entirely across the end of the car, and has a hand-lever, H, upon each end, by which it may be rotated. By this means the car can be uncoupled or the catch-pin held in any desired position from either side of the car without any liability of injuring the operator.

The catch-wheel I is of a peculiar construction, and serves the purpose of holding the catch-pin up by the engagement of the pawl J therewith, and is adapted by a further movement to cause a disengagement of said pawl therefrom, whereby the catch-pin is released and permitted to drop back into its normal position. One side of said wheel is recessed, as shown, the bottom of the recess being two flat surfaces rising and meeting centrally. At the point of junction, which is a diagonal line across the bottom, a stud, *i*, projects upwardly, partially dividing the space in the recess. This stud is set on the same angle as the dividing-line of the two faces, and is so situated as to guide the end of the pawl J down past it upon one side, and to guide it back upon the other, thus causing said point to travel completely around said stud each time the catch-wheel is given the partial rotation in each direction incident to its operation. A square-faced notch, *i'*, forms the termination of the highest face of the bottom of the recess, and into this the point of the pawl J drops as it passes the stud *i*, and, if the movement of the wheel is stopped at that point, there remains and is held thereby. When the catch-wheel is given a slightly further rotation the point of the pawl drops over onto the lower face, and is guided by the diagonal side face of the stud *i*, and the continuation thereof at its lower end, back to the higher face as the catch-wheel rotates in the reverse direction.

The pawl J is a common pawl, such as is ordinarily used with ratchet-wheels. The chain K is only used with box-cars, and extends to the top of the car, so that the coupling may be operated from that point.

The operation of our said invention may be

recapitulated as follows: The cars come together, forcing the link into the draw-head in the ordinary manner. The catch-pin drops into the link and holds it. When it is desired to uncouple the cars the operator rotates the shaft G by means of one of the hand-levers H or the chain K, thus raising the catch-pin B through the rod E and releasing the coupling-link. When it is desired to have the catch-pin remain in elevated position the rotation of the shaft is stopped when the wheel I has reached that point which permits the point of the pawl J to drop into the notch *i'*. When it is desired to have the catch-pin drop again a further rotation is given to the shaft, which permits the point of the pawl to drop out of the notch, and when the force on the shaft is relieved to return to the opposite side of the line dividing the two faces of the bottom of the recess in the wheel, as hereinbefore explained.

Having thus fully described our said invention, what we claim as new, and desire to secure by Letters Patent, is—

1. The combination, in a car-coupling, of the draw-head A, catch-pin B, rod E, arm F, shaft G, having hand-levers H, wheel I, constructed to operate as specified, and pawl J, substantially as set forth.

2. The combination, with the rotating shaft G for lifting the catch-pin of a car-coupling, of a catch-wheel, I, mounted thereon and provided with a recess wherein a pawl may travel back and forth, and a notch, *i'*, wherein said pawl will engage at a certain point in the rotation of said wheel, but from which it will be disengaged by a slightly further rotation, substantially as set forth.

In witness whereof we have hereunto set our hands and seals, at Indianapolis, Indiana, this 3d day of March, A. D. 1882.

JOHN S. OWEN. [L. S.]
GEORGE L. SNIDER. [L. S.]

In presence of—
C. BRADFORD,
CHAS. L. THURBER.