(No Model.)

G. W. PUTNAM.

CAR COUPLING.

No. 267,252. Patented Nov. 7, 1882.

Fig. 1.

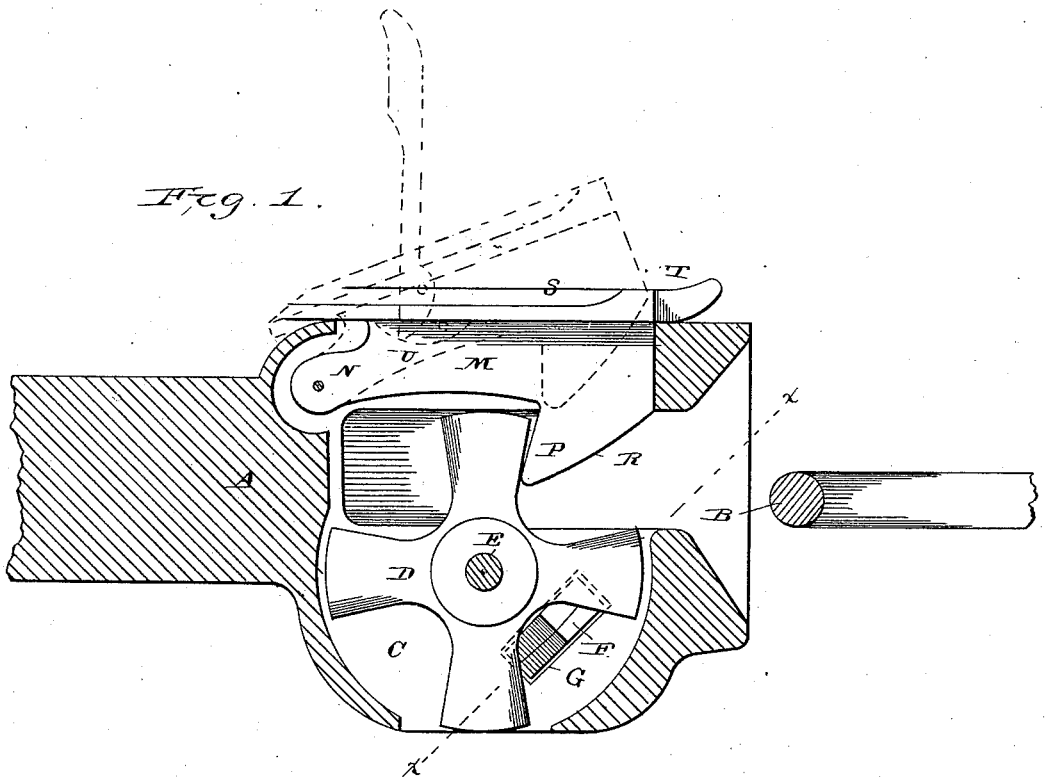


Fig. 2.

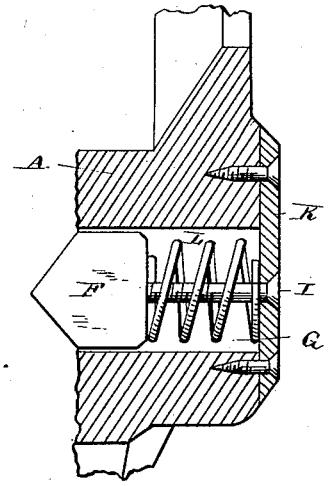
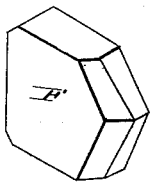


Fig. 3.



Witnesses.

Edwin L. Yewell.

J. J. McCarthy.

Inventor.

George W. Putnam.

E. M. Alexander

Attorney.

UNITED STATES PATENT OFFICE.

GEORGE W. PUTNAM, OF GLENS FALLS, NEW YORK.

CAR-COUPLING.

SPECIFICATION forming part of Letters Patent No. 267,252, dated November 7, 1882.

Application filed August 24, 1882. (No model.)

To all whom it may concern:

Be it known that I, GEORGE W. PUTNAM, of Glens Falls, in the county of Warren, and in the State of New York, have invented certain new and useful Improvements in Car-Couplings; and I do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, and to the letters of reference marked thereon, making a part of this specification.

This invention relates to certain improvements in car-couplers, and it has for its objects to provide for holding the link in one draw-head in proper position to enter the opposite draw-head for coupling, and to provide for automatically coupling the cars when they come together and for uncoupling them without rendering it necessary to enter between the cars, as more fully hereinafter specified. These objects I attain by the means illustrated in the accompanying drawings, in which—

Figure 1 represents a longitudinal vertical section of a draw-head showing my coupling devices. Fig. 2 represents a sectional view on the line *x x* of Fig. 1, and Fig. 3 represents a detached view of a bolt for holding the device which supports the link while coupling in proper position for the purpose.

The letter A indicates one of the draw-heads of a car, which is provided with the usual flaring mouth, and B the link in position about to enter the draw-head. The draw-head, besides the ordinary recess, is provided with a vertical recess, C, which is semicircular at its bottom, and in which the coupling devices are partially located.

The letter D indicates a wheel, located in the lower part of the vertical slot, being mounted on a transverse shaft, E, the said wheel being provided with four arms, as indicated in Fig. 1.

The letter F indicates a bolt, located in a slot, G, at one side of the coupling, adapted to slide in said slot, and held therein by means of a screw, I, which sets loosely through an opening in a detachable plate, K, which covers the slot on the outside of the draw-head. Between the plate and the bolt is a spiral spring, L, which holds the bolt forward normally against one of the arms of the wheel, the said arms being rounded or beveled at their sides in order to throw the bolt back into the slot as the wheel is rotated, the end of the bolt being beveled and pointed, as indicated, in order that it may be thus driven back.

The letter M indicates a pawl, pivoted at N in the upper part of the vertical recess in the draw-head. The said pawl is provided with a hook, P, which serves as a detent to hold the wheel when the cars are coupled. The forward portion of the pawl is beveled, as indicated at R, so that the entering will lift the pawl to permit the link to enter. The pawl is provided with projecting flanges S at each side, on top, which rest upon the upper part of the draw-head when the pawl is down, and hold it in position. To one side of the pawl is fulcrumed a lever, T, the lower end of which works in a curved recess, U, in the upper surface of the draw-head, at one side, in such manner that the pawl may be elevated to uncouple, without rendering it necessary to go between the cars.

The operation of my invention is as follows: The link is forced into the draw-head, throwing up the pawl and forcing the upper vertical arm of the wheel backward, turning the wheel a quarter of a revolution. This causes the forward horizontal arm of the wheel to enter the link and assume a vertical position after it has passed the hook of the pawl, which permits the pawl to drop and secure the link. The link will be held in position by the wheel to enter the opposite link, when it automatically operates the parts in a manner similar to that just above mentioned, coupling the cars. When the cars are to be uncoupled it is simply necessary to elevate one of the levers fulcrumed to the pawls.

Having thus described my invention, what I claim, and desire to secure by Letters Patent, is—

1. In combination with the draw-head of a car, a wheel located in a vertical recess therein and having the arms rounded or beveled at the sides, and a beveled and pointed stop-bolt, whereby the wheel is held to retain the

link in position to enter the opposite coupling-head, substantially as and for the purposes specified.

2. The combination, in a draw-head, of the wheel and its stop-bolt and the pawl and its lever, all arranged to operate substantially in the manner specified.

In testimony whereof I affix my signature, in presence of two witnesses, this 16th day of August, 1882.

GEO. W. PUTNAM.

Witnesses:
W. A. FAXON,
C. CASAVANT.