

(No Model.)

P. THRUSH & D. W. AURA.

CAR COUPLING.

No. 344,693.

Patented June 29, 1886.

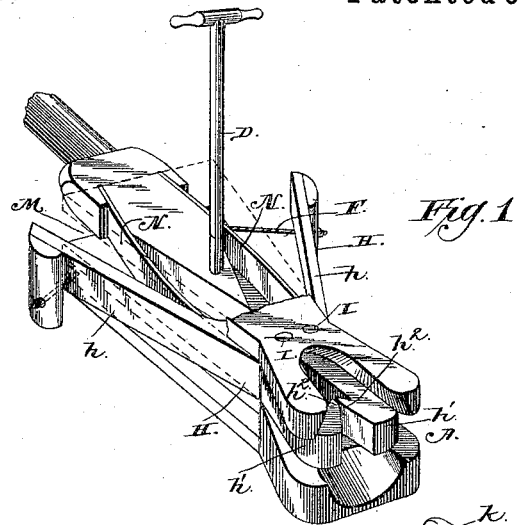


Fig. 1.

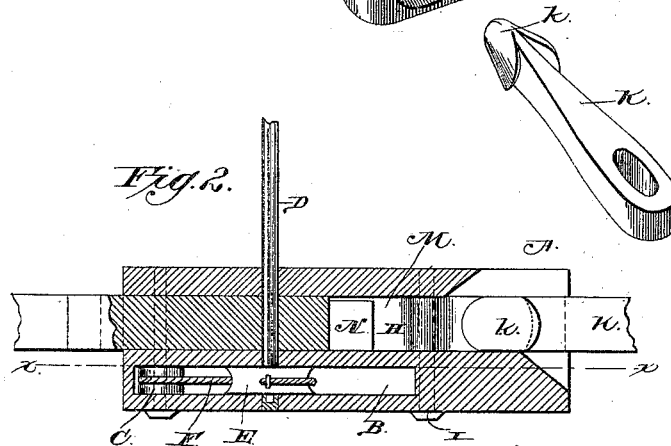


Fig. 2.

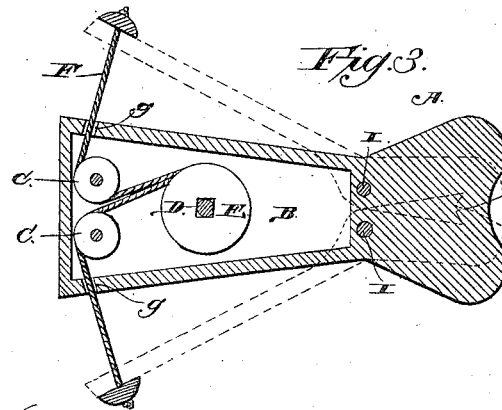


Fig. 3.

Witnesses  
*M. C. Fowler*  
*J. W. Hanna*

Inventors  
*P. Thrush & D. W. Aura*  
By their Attorneys  
*C. A. Snowden*

# UNITED STATES PATENT OFFICE.

PEARY THRUSH AND DANIEL WEBSTER AURA, OF WEST ALEXANDRIA,  
OHIO.

## CAR-COUPLING.

SPECIFICATION forming part of Letters Patent No. 344,693, dated June 29, 1886.

Application filed April 19, 1886. Serial No. 199,413. (No model.)

*To all whom it may concern:*

Be it known that we, PEARY THRUSH and DANIEL WEBSTER AURA, citizens of the United States, residing at West Alexandria, in the county of Preble and State of Ohio, have invented a new and useful Improvement in Car-Couplings, of which the following is a specification.

Our invention relates to an improvement in car-couplings; and it consists in the peculiar construction and combination of devices, that will be more fully set forth hereinafter, and particularly pointed out in the claim.

In the drawings, Figure 1 is a perspective view of a car-coupling embodying our improvements, with the upper portion of the draw-head partly broken away. Fig. 2 is a vertical longitudinal sectional view. Fig. 3 is a horizontal sectional view.

A represents the draw-head, in the lower side of which is formed a case or chamber, B, which is opened at its rear end. In between the upper and lower walls of the chamber, at the rear end of the same, is journaled a pair of guiding-sheaves, C, and on the lower end of a shaft, D, which is journaled vertically in the draw-head and extends through the same, is secured a pulley or drum, E, to which a rope or cord, F, is secured. The ends of the said rope or cord extend rearwardly from the drum E and over the sheave C, and from thence pass outwardly through openings g, which are made in the side walls of the chamber B, and are connected to the outer free ends of pivoted jaws H. These jaws are pivoted between the lower and the upper side of the draw-head upon pins I, which connect the said upper and lower portions of the draw-head. Each jaw is provided with a rearward-extending arm, h, the said arms of the jaws diverging from each other, and with a forward-extending arm, h', which extends at about an angle of thirty degrees from the arm h, and is provided at its outer end, on its inner side, with a head or shoulder, h<sup>2</sup>. The mouth of the draw-head is concaved or rounded, as shown, so as to guide the barbed head of the coupling link or pin K into the mouth of the draw-head, in order to engage with the heads or shoulders of the pivoted jaws.

In the central portion, M, of the draw-head, between the top and bottom sides thereof, are secured flat springs N, the front ends of which are free and bear against the inner sides of

the arms h of the pivoted jaws, thereby normally diverging the said arms h, and closing the heads of the pivoted jaws together. By this construction it will be readily understood that when the cars come together the coupling pin or link having the barbed head h enters the draw-head and passes between the shouldered heads of the pivoted jaws, and that the action of the springs on the said pivoted jaws causes their heads to close toward each other behind the barbed heads of the coupling pin or link, thereby coupling the cars together beyond the possibility of their becoming accidentally detached.

In order to uncouple the cars it will be necessary to partly rotate the vertical shaft D, which is provided at its upper end with a hand wheel or crank for that purpose. When the said shaft D is turned, the drum E is also rotated, thereby drawing in upon the cords or ropes F, and drawing the rear ends of the pivoted jaws toward each other, thus causing their headed ends h<sup>2</sup> to diverge and release the head of the coupling pin or link.

A car-coupling thus constructed is cheap and simple, is automatic in its operation, and is not likely to get out of order.

Having thus described our invention, we claim—

The combination, with the draw-head A, formed with a chamber, B, in its under side, sheaves C, journaled in the chamber, a vertical shaft, D, journaled vertically in the draw-head, a pulley or drum, E, mounted on the shaft within the chamber, and a rope, F, secured to the drum and formed into two branches, of the jaws H, pivoted in recesses between the lower and upper portions of the draw-head, and provided with rearwardly-extending arms h, to which the two ends of the rope F are attached, and forwardly-extending arms h', which extend at an angle to the arms h, and springs N, bearing against the inner side of the arms h, the pins I, which serve as pivots for the jaws, also providing connecting means for the upper and lower portions of the jaws, as and for the purpose set forth.

In testimony that we claim the foregoing as our own we have hereto affixed our signatures in presence of two witnesses.

PEARY THRUSH.

DANIEL WEBSTER AURA.

Witnesses:

JOHN H. SIGGERS,

W. T. GILL.

It is hereby certified that the name of one of the patentees in Letters Patent No. 344,693, granted June 29, 1886, for an improvement in "Car-Couplings," was erroneously written and printed "Daniel Webster Aura," whereas said name should have been written and printed *Daniel Webster Avra*; and that said Letters Patent should be read with this correction therein that the same may conform to the record of the case in the Patent Office.

Signed, countersigned, and sealed this 3d day of August, A. D. 1886.

[SEAL.]

H. L. MULDROW,  
*Acting Secretary of the Interior.*

Countersigned:

R. B. VANCE,  
*Acting Commissioner of Patents.*