

(No Model.)

T. JAMISON.
CAR COUPLING.

No. 344,316.

Patented June 22, 1886.

Fig. 1.

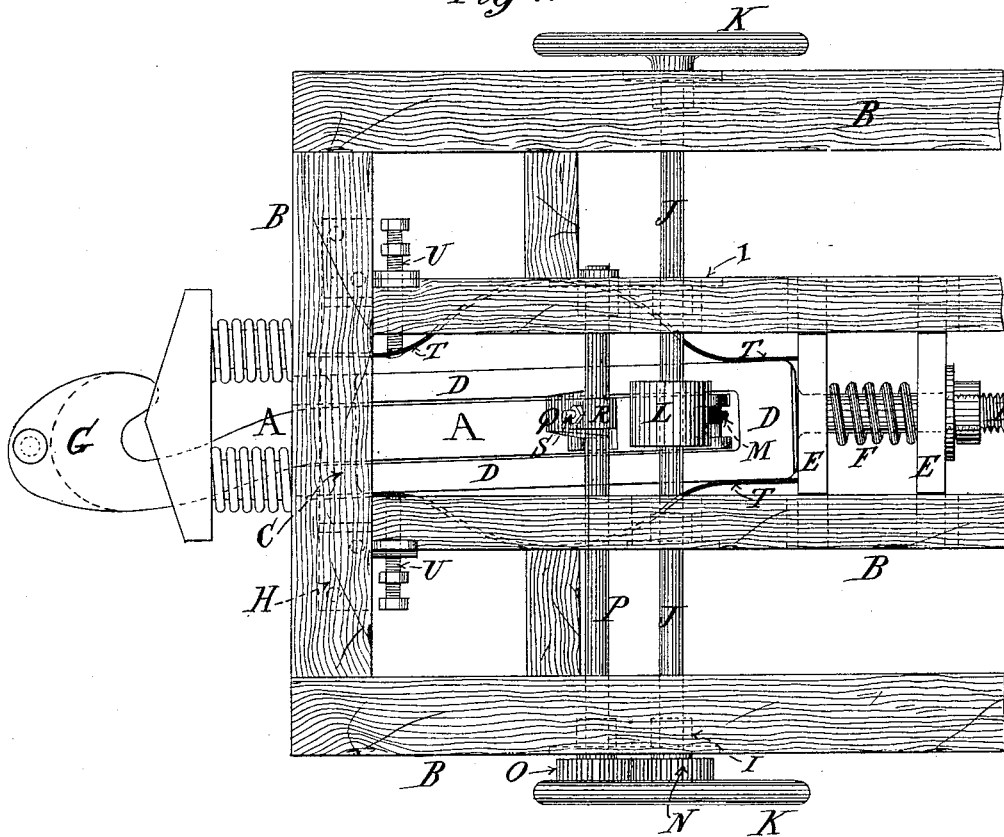
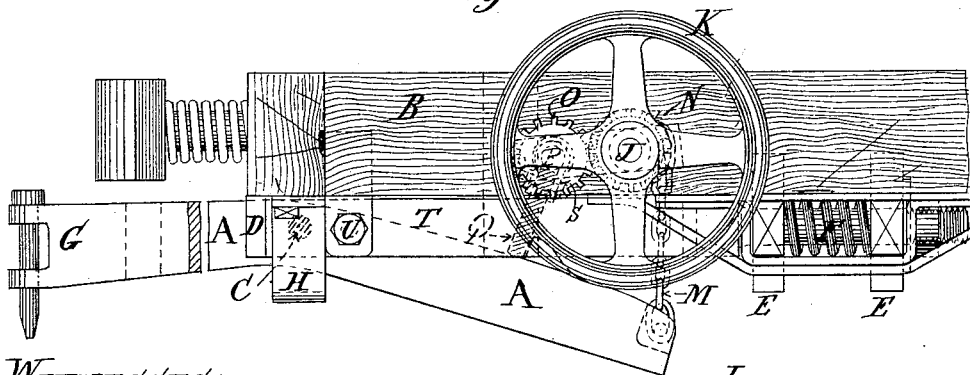


Fig. 2.



WITNESSES
Joseph W. Brooks,
Edwin Sauter.

INVENTOR
Thomas Jamison
Paul B. Russell
his attorney

UNITED STATES PATENT OFFICE.

THOMAS JAMISON, OF ST. LOUIS, MISSOURI, ASSIGNOR OF ONE-THIRD TO
WILLIAM J. HANLEY, OF SAME PLACE.

CAR-COUPLING.

SPECIFICATION forming part of Letters Patent No. 344,316, dated June 22, 1886.

Application filed April 15, 1886. Serial No. 198,934. (No model.)

To all whom it may concern:

Be it known that I, THOMAS JAMISON, a citizen of the United States, residing in the city of St. Louis, State of Missouri, have made a certain new and useful Improvement in Car-Couplers, of which the following is a full, clear, and exact description.

My invention relates to improvements in car-couplers, and has for its object to effect the coupling together of railroad-cars without the necessity of the brakeman going between the ends of the cars, and for regulating the tension of the springs allowing side-play to the draw-bars.

On the accompanying drawings, Figure 1 is a plan representing my improved car-coupler applied to the lower frame-work of a railroad-car, and Fig. 2 a side elevation thereof, like letters of reference denoting like parts in both figures.

A represents the draw-bar, arranged beneath the car-frame B, and pivoted at C to the forked front end of the connecting draw-bolt D, the rear or bolt end of which passes through the followers E and their interposed spring F, so that the draw-bar A, with its coupling end G and connection D, is capable of horizontal movement within the limits of the bridle or stirrup H to either side of the center line of the car, according to the side-play required when coupling, and for the movements of the car when running.

Transversely through the car-frame B is mounted in bearings I a horizontal shaft, J, which is provided at each end, outside the car, with a hand-wheel, K, and at the middle, immediately over the draw-bar A, with a drum, L, the periphery of which is connected to the inner end of the draw-bar A by a chain, M.

On the shaft J, between the hand-wheel K and the car-frame B, is fixed a spur-wheel, N, gearing into a spur-wheel, O, on the end of a second shaft, P, which is also arranged transversely through the car-frame B, parallel with shaft J, and carries an arm or key, Q, the direction of which, when the coupling end G of draw-bar A is coupled with that of the succeeding car, or is in a horizontal position, as shown on the drawings, will be downward, with its outer end or nose against the depressed

inner arm of the draw-bar A, which is thereby locked or prevented from rising, and its coupling end G from lowering and becoming uncoupled.

The arm or key P is secured to its shaft P by clip-strap R, which passes partly round the shaft P and along each side of the arm or key Q, to which it is hinged by bolt or pin S, the hinged end of arm or key Q being convex in the direction of shaft P, against which it abuts. By this means, when the outer end or nose of the arm or key Q is in contact with the depressed inner arm of draw-bar A, and the latter is constrained to move horizontally to either side of the center line of car, as before described, a corresponding radial adjustment is allowed to the arm or key Q in the direction of its shaft P.

When required to uncouple the cars, the shaft J, with its spur-wheel N, is partially rotated by one of the hand-wheels K, which causes the spur-wheel O and shaft P to be correspondingly rotated, whereby the arm or key P is released and thrown upward from the depressed inner arm of the draw-bar A. Simultaneously the draw-bar L takes up the requisite slack given to the chain M, and causes the latter to lift the depressed arm of the draw-bar A, thereby lowering and uncoupling its end G from that of the draw-bar of the next car. On letting go the hand-wheel K the inner arm of draw-bar A falls, and pulling back the chain M, the latter rotates the drum L, shaft J, spur-wheels N O, and shaft P in the opposite direction, so as to bring the arm or key Q against the depressed inner arm of the draw-bar A, as before. The various parts of the apparatus being in this position, the coupling of the cars is effected automatically by the coupling ends G of the draw-bars of the cars coming in contact and displacing each other sidewise until the hooks are clear of each other, when they will be interlocked by the pressure of the springs T T, which are arranged externally against each side, respectively, of the forked front end of the connecting draw-bolt D, and tensionally adjusted by set-screws U U, according to the pressure required on the draw-bar A.

I claim as my invention—

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1. In car-couplers, the combination, with the draw-bar A, pivoted at C to connecting draw-bolt D, of shaft J, hand-wheels K, drum L, and chain M, substantially as shown, and for the purpose described.

2. In car-couplers, the combination, with the draw-bar A, pivoted at C to connecting draw-bolt D, of shaft J, hand-wheels K, spur-wheels N O, shaft P, and arm or key Q, substantially as shown, and for the purpose described.

3. In car-couplers, the combination, with the draw-bar A, pivoted at C to the connecting draw-bolt D, of shaft J, hand-wheels K,

drum L, chain M, spur-wheels N O, shaft P, and arm or key Q, substantially as shown, and for the purpose described.

4. In car-couplers, the combination, with the draw-bar A and its connecting draw-bolt D, of springs T and set-screws U, substantially as shown, and for the purpose specified.

In testimony whereof I have affixed my signature, in presence of two witnesses, this 3d day of April, 1886.

THOMAS JAMISON.

Witnesses:

WILLIAM JAMISON,
THOMAS J. McDONOUGH.