

Car Coupling.

Patented Jan. 10, 1871.

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Letters Patent No. 110,880, dated January 10, 1871.

IMPROVEMENT IN CAR-COUPPLINGS.

The Schedule referred to in these Letters Patent and making part of the same.

To all whom it may concern:

Be it known that I, GEORGE H. WEEKS, of Allegan, in the county of Allegan and State of Michigan, have invented a new and useful Improvement in Car-Coupling; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable others skilled in the art to make and use the same, reference being had to the accompanying drawing forming part of this specification, in which—

Figure 1 is a vertical longitudinal section of my improved car-coupling taken through the line $x x$, fig. 2.

Figure 2 is a top view of the same.

Figure 3 is a detail section taken through the line $y y$, fig. 1.

Similar letters of reference indicate corresponding parts.

My invention has for its object to furnish a simple, strong, durable, and effective car-coupling, which shall be so constructed as to couple the cars automatically as they are run together, and which may be easily and conveniently uncoupled; and

It consists in the construction and combination of the various parts of the coupling, as hereinafter more fully described.

A represents the bumper-head, which may be constructed and secured to the body of the car, in the ordinary manner.

The mouth of the bumper-head A is made hopper-shaped, in the ordinary manner, and the inner part of its cavity is enlarged to form shoulders to receive and support the bars B.

The bars B are pivoted at the outer edges of their ends to the upper and lower parts of the bumper-head A, as shown in figs. 1, 2, and 3, in such positions that their inner edges may meet or nearly meet when the said bars are swung into the position shown in fig. 3, in which position their ends and the outer parts of their forward sides rest against the solid shoulders of the bumper-head A.

Upon the inner parts of the upper ends of the bars B are formed pivots or arms b^1 , which project through an opening in the upper part of the bumper-head A, and through inclined slots in the plate C, which slides upon the top of the bumper A, and the edges of which enter and work in grooved flanges a^1 formed upon or attached to said top.

Upon the rear edge of the slide C is formed, or to it is attached a guide-pin, D, which passes through a

guide-hole in a flange or keeper, a^2 , formed upon or attached to the top of the bumper A.

Around the arm or pin D is coiled a wire-spring, E, the forward end of which rests against the rear edge of the plate or slide C, and the rear end of which rests against the flange a^2 .

In the upper and lower part of the inner edges of the bars B are formed semi-conical notches b^2 to receive the coupling-bar F, which is made with a conical head upon each end.

By this construction, when the cars are run together, the conical head of the bar F will enter the upper or lower conical recess b^2 in the edges of the bars B, and force the inner edges of the said bars back until the head of the bar F has passed the said edges, when the spring E will force the slide C back, the inclined sides of the slots of which press against the pins b^1 of the bars B, and thus force said bars back to their places, when the draft-strain will be sustained by the shoulders of the heads of the bar F resting against the inner sides of the bars B, as shown in fig. 2.

By forcing the slide C back, the inclined sides of its slots pressing against the pins b^1 force back the inner edges of the bars B, releasing the bar F and uncoupling the cars.

G is a lever, the end of which is pivoted to a support attached to the top of the bumper A, and which is connected with the slide C by a rod or chain, H, so that, by operating the lever G, the slide C may be easily and conveniently drawn back to uncouple the cars.

Having thus described my invention,

I claim as new and desire to secure by Letters Patent—

1. The pivoted bars B, having semi-conical notches formed in their adjacent edges, slide C having inclined slots formed in it, guide-pin D, and spring E, in combination with each other and with the bumper B, substantially as herein shown and described, and for the purpose set forth.

2. The combination of the lever G and connecting-rod or chain H with the spring E, guide-pin D, slotted slide C, pivoted and notched bars B, and bumper A, substantially as herein shown and described, and for the purpose set forth.

GEORGE H. WEEKS.

Witnesses:

J. W. STONE,
ALANSON CASE.