J. B. NELSON.

CAR COUPLING.

No. 267,101.

Patented Nov. 7, 1882.

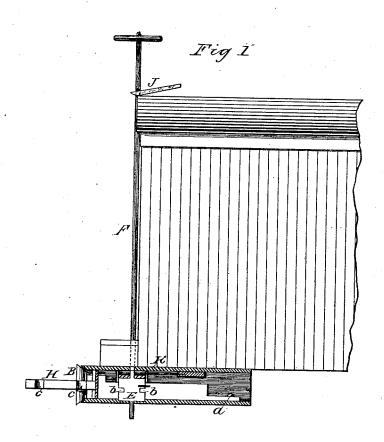
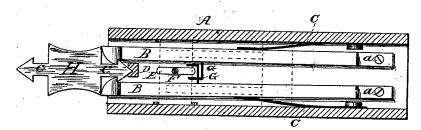


Fig. 2.



Witnesses: J.M. Rynolds fr. Harry Sernhard

John & Treventor. per Codoen Brod. Attorneys

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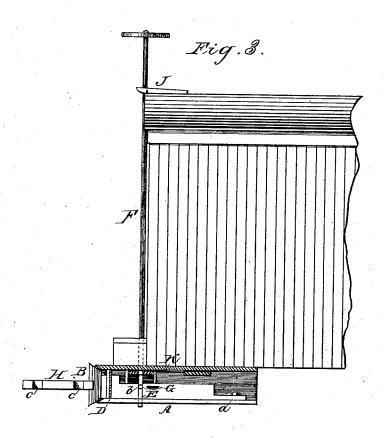
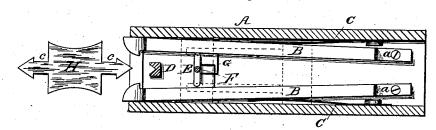


Fig.4.



Witnesses:

JOV. Reynolds Jr. Harry Fernhard John & Kelson per Widson Birt Attorneys

UNITED STATES PATENT OFFICE.

JOHN B. NELSON, OF VIOLA, TEXAS.

CAR-COUPLING.

SPECIFICATION forming part of Letters Patent No. 267,101, dated November 7, 1882.

Application filed September 13, 1882. (No model.)

Io all whom it may concern:

Be it known that I, John B. Nelson, a citizen of the United States, residing at Viola, in the county of Cass and State of Texas, have invented certain new and useful Improvements in Car-Couplings, of which the following is a specification, reference being had therein to

the accompanying drawings.

This invention relates to an improvement in car-couplings, having for its object to effect the coupling of the cars with facility and without danger to the operator, the coupling operation being performed automatically, and without requiring the passing of the operator between the cars; and it consists in the employment, in connection with a draw-bar, of parallel spring-jaws, which are adapted to be operated by a cam on a shaft, said cam being arranged in connection with automatic retaining devices, substantially as hereinafter more fully set forth.

In the accompanying drawings, Figure 1 is a view of my improved car-coupling, in longitudinal section, applied to the end of a car, partly broken away. Fig. 2 is a view partly in plan and partly in horizontal section of my coupling. Figs. 3 and 4 are similar views to Figs. 1 and 2, respectively, showing the parts

in an uncoupled position.

In putting into practice my invention, I employ, in connection with a chamber or casing, A, suitably secured to the under side of and projecting beyond the end of the car, as usual, two jaws, B, pivoted at one end, at α α, in the bottom of said casing at its rear end. These jaws are held together at their hooked ends by the springs C, bearing against them, and fastened to the inner sides of the casing or draw-bar A.

Arranged in the draw-bar A, a little inward from the jaws proper or hooks of the jaws B, and about in line with the plane of the incoming coupling bar or hook, is a recessed bar or stop, D, to limit the inward movement of the

45 coupling bar or hook.

E is a cam, rectangular in shape, and arranged in the draw-bar between the jaws B, near their forward ends, it being secured upon or having a shaft, F, bearing at its lower end 50 in the bottom of the draw-bar or casing A, its upper end extending a convenient distance above the top of the car, and having a handwheel for its operation. Engaging with a ratchet or arm of said shaft is a pawl upon

the top of the car to hold it from turning when 55

not being operated.

G G are two half-staples or L-shaped bars, with the ends of their longer portions or standards secured to the inner sides of the shanks of the jaws B, and their right-angled 60 shorter portions or bases adapted to cross their standards, they being arranged in a horizontal position. The bases or shorter portions of the bars G are thus caused to project parallel with the sides of the cam E, they being disposed 65 contiguously to the latter, and therefore serve to prevent the cam from being jarred so as to turn and accidentally open the jaws when the cars are in motion. The retaining device formed by the bars G are permitted to pass 70 the cam when the latter is being turned, by operating its shaft by hand by means of slots or recesses b, cut in its side edges, as seen in

H is the coupling bar or hook, with its ends 75 provided with necks or narrowed extensions c, while the outer ends of the latter are made conical, with their bases projecting beyond the said necks to provide shoulders thereat to engage with the jaws B, as seen in Fig. 2, in 80

coupling the cars.

The coupling operation is automatic, as readily understood by reference to the drawings.

To uncouple the cars it is only necessary to depress the lever J, which is pivoted to the top 85 of a freight-car or the platform of a passenger-car, which will raise the shaft F and overcome the pressure of a spring, K, which serves to keep slots b of the cam E below the L-shaped bars G until the shaft F is raised by depressoing lever J, when the jaws B can be separated by turning the hand-wheel.

I claim and desire to secure by Letters Pat-

ent-

In a car-coupling, the combination, with the parallel spring-jaws arranged in the draw-bar or case, of the cam and its shaft, said jaws having L-shaped bars, with their shorter portions disposed parallel with the said cam, substantially as and for the purpose set forth.

In testimony whereof I affix my signature in presence of two witnesses.

JOHN B. NELSON.

Witnesses:

HENRY X SWADER,
mark.
T. S. RIVES.