MELOT & FRY.

Car Coupling.

No. 50,148. Patented Sept. 26, 1865.

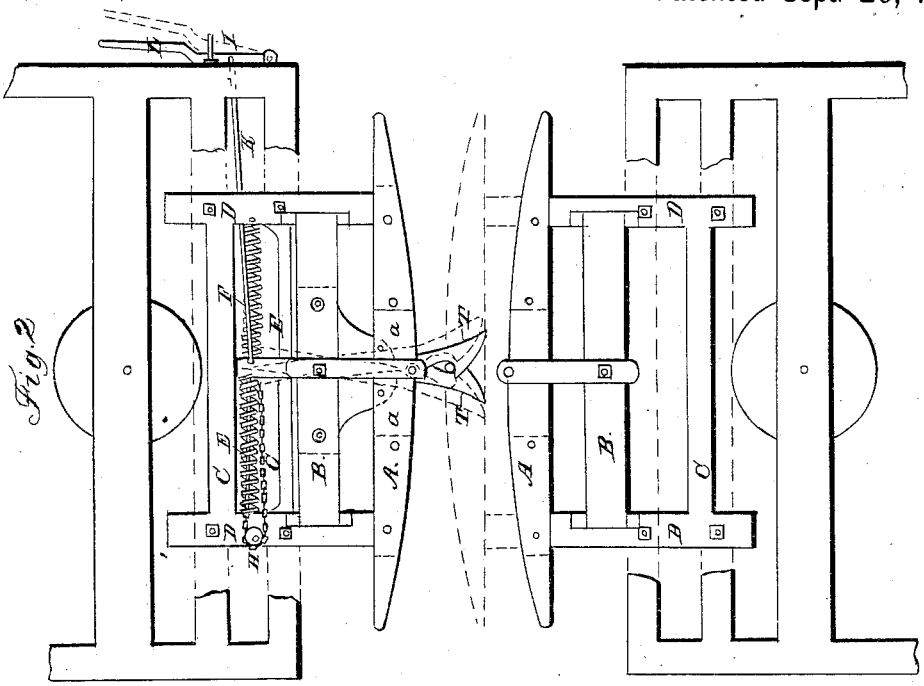

Fig. 2

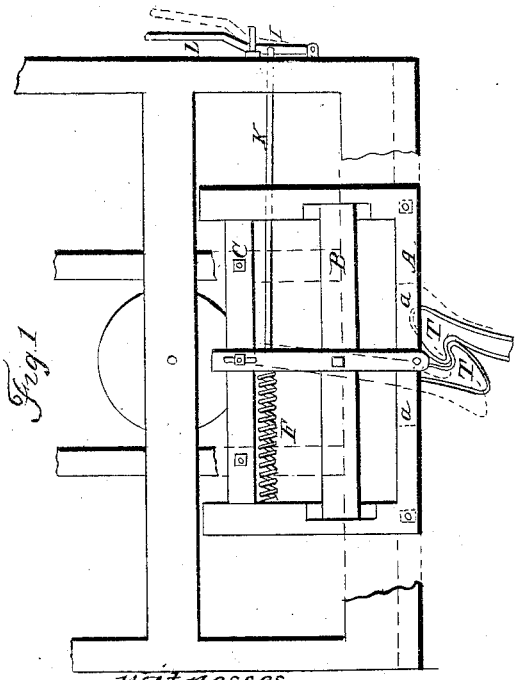

Fig. 1

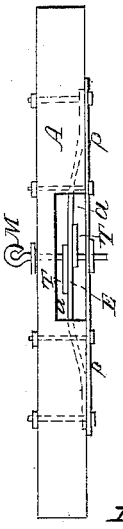

Fig. 3

Fig. 4

Witnesses
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AMOS MELOT AND JEREMIAH T. FRY, OF READING, PENNSYLVANIA.

IMPROVED CAR-COUPLING.

Specification forming part of Letters Patent No. **50,148**, dated September 26, 1865.

To all whom it may concern:

Be it known that we, AMOS MELOT and JEREMIAH T. FRY, of the city of Reading, in the county of Berks and State of Pennsylvania, have invented a new and useful Self-Acting Car-Couple; and we do hereby declare that the following is a full 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.

The nature of our invention consists in the arrangement of the tongs in combination with the spiral springs and the lever at the side of the platform for the purpose of coupling and disconnecting railway-cars. The frame to which the iron coupling is attached is made of wood and attached to the platform of the cars.

Figure 1 represents a top view of a single-hook couple and spring; Fig. 2, a top view of the double-hook couple or tongs, with its springs and lever connected; Fig. 3, a sectional front view; and Fig. 4 represents the frame with the middle beam resting between gum-elastic or rubber linings, for the purpose of giving flexibility to the couple and relieving it from sudden jars.

The frame-work consists of five distinct pieces or beams well braced together, A being the front beam, B the middle beam, C the rear beam, and D D the side beams.

The front beam, A, is five and one-half feet long, six inches in thickness, three inches in width at the ends, and a convexity of three inches more, with an aperture, *a a*, in the center of the convex surface of the width of thirteen inches, and in depth of two and one-quarter inches through the entire width of said front beam, the same being plated with iron one-eighth of an inch in thickness, said iron plate being four and one-half feet long and three inches in width, as shown at *p p*, Fig. 3.

The middle beam is five inches in width by four and one-half inches in thickness and three feet long, with an aperature in the center, from front to rear of the beam, of four and one-half inches in width and one and one-half inch in depth, the beam B being inserted into the side beams, D D, at a distance of five inches from the front beam, into which said side beams are inserted.

The side beams, D, are each two feet three inches in length, four and one-half inches in thickness and width, and each formed of two pieces, for the purpose of inlaying or lining with gum-elastic the places in the side beams where the middle beam is inserted, thereby giving to the couple flexibility.

The tongs T T are one-half an inch in thickness and three and one-half inches in width, excepting the ratchet or tooth, which is two and one-half inches at its neck and four and one-half inches at its bill, the ratch being at the end of the tongs, and the tongs three feet and one inch in length and slightly curved at the ends. The tongs pass through the aperture *a* in front and middle beams, A B, and are fastened one upon the other in the aperture in the middle beam, B, by an iron screw-bolt, M. The ratchet end of the tongs projects in front of the beam A, and is steadied by a bent-iron bar, E, fastened to the side beams, D D, and passing between the tongs and between the middle and end beams. To the end of each tong is fastened a spiral steel-wire spring, F F, the opposite ends being attached to the side beams, D D, near the back beam, C.

To the end of the lower tong a chain or rope, G, is attached, which passes over a pulley, H, on the top of the side beam, D, and along the rear or end beam through a hole in the opposite side beam, D; thence through an iron hook, I, (at the outer end of an iron rod, K,) attached to an iron lever, L, at the side of the car. From the hook I the rope or chain passes back through the same hole and through the interior of spiral steel spring G to the upper end of the other tong, where it is permanently fastened.

The whole apparatus is covered with sheet-iron.

The operation of the self-acting car-couple is as follows: When the cars are to be connected and coupled, by pushing a car with our coupling toward another the pin or bolt of the next car will pass between the forks of the tongs, which separate easily and catch in the hooks or ratchet of the tongs; and when the cars are to be disconnected and uncoupled we push the lever L or draw the handle of the lever at the side of the car, which causes the forks of the tongs to separate, and the cars become disconnected. The cars can thus be un-

coupled, even when traveling at their highest speed, and accidents avoided.

What we claim as our invention, and desire to secure by Letters Patent, is—

The arrangement of the tongs T, spiral springs F, chain G, and lever L, when constructed and combined with the frame and rubber lining, as herein described, and for the purposes set forth.

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JEREMIAH T. FRY.

Witnesses:
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