T. Morgan's Car Coupling.

PATENTED JUL 4 1871

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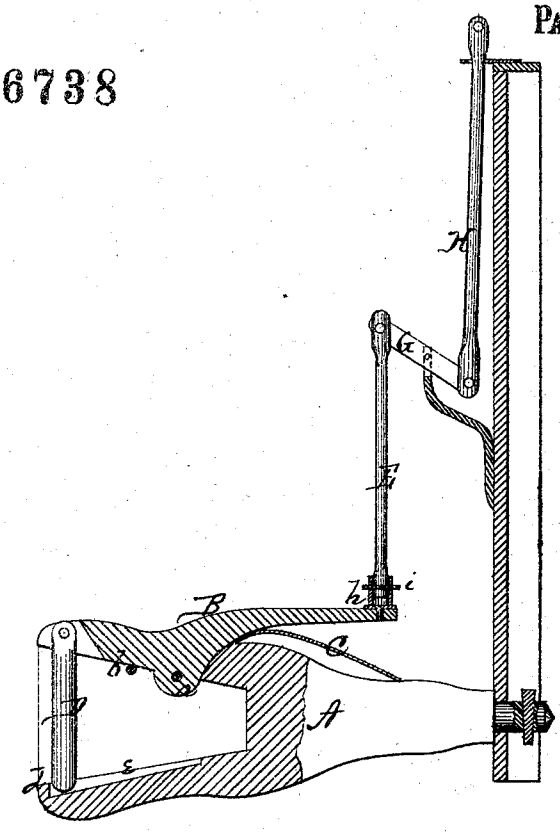

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UNITED STATES PATENT OFFICE.

THOMAS MORGAN, OF MARQUETTE, MICHIGAN.

IMPROVEMENT IN CAR-COUPLINGS.

Specification forming part of Letters Patent No. 116,738, dated July 4, 1871.

To all whom it may concern:

Be it known that I, THOMAS MORGAN, of Marquette, in the county of Marquette and State of Michigan, have invented certain new and useful Improvements in Railroad-Car Couplings; and I do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawing and to the letters of reference marked thereon which form part of this specification.

The nature of my invention consists in the construction and arrangement of a car-coupling, as will be hereinafter more fully set forth.

In order to enable others skilled in the art to which my invention appertains to make and use the same, I will now proceed to describe its construction and operation, referring to the annexed drawing, which represents a longitudinal vertical section of my car-coupling.

A represents the bumper or front part of the draw-head, the upper side of which is slotted or mortised longitudinally from the front end a suitable distance toward the rear. In this slot is inserted the front end of a lever, B, provided on its under side with a rounded projection or ear, *a*, through which a bolt passes into the draw-head at the rear end of the slot or mortise to pivot said lever to the draw-head. This lever is of the peculiar bent or curved shape shown in the drawing, so that while the front part of the same is in the slot on the draw-head the rear part is above and elevated a suitable distance from the draw-head. A spring, C, arranged under the rear end of the lever B, forces the same upward, so that the front end will be down upon a pin, *b*, in the draw-head. The front end of the lever B is slotted or forked, and in the same is pivoted the coupling-pin D, the lower end of which extends into a groove, *e*, on the upper surface of the bottom of the draw-head. This pin is thus allowed to swing backward when the coupling-link is inserted in the draw-head, but cannot move forward from a vertical position on account of a shoulder or slot, *d*, placed at the front end of the groove *e*. It will thus be seen that, as soon as the link is inserted, and the pin swings forward or drops into the link, the cars are coupled. Upon the rear end of the lever B is secured a socket, *h*, in which the lower end of a rod, E, is inserted and held by a pin, *i*. The upper end of this rod E is pivoted to a short lever, G, which is itself pivoted in its center to an arm projecting from the end of the car. At the other end of the lever G is pivoted a rod, H, which passes up through guides at the end of the car. By pulling up on the rod H it will be seen that the rod E presses the rear end of the lever B, downward, raising the front end of the same so as to lift the swinging pin D above the stop *d*, thus allowing the same to swing forward so as to withdraw the coupling-link and uncouple the cars.

Having thus fully described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. The lever B, constructed with socket *h*, in combination with rod E, lever G, and handle H, all arranged to operate pin D, substantially in the manner and for the purpose set forth.

2. In combination with the subject-matter of the above, pins D *b* and draw-head, all constructed and arranged to operate as described.

In testimony that I claim the foregoing as my own I affix my signature in presence of two witnesses.

THOMAS MORGAN.

Witnesses:

RICHARD J. DOWLING,

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