(No Model.)

J. H. FIELDS.

CAR COUPLING.

No. 383,517. Patented May 29, 1888.

Fig. 1.

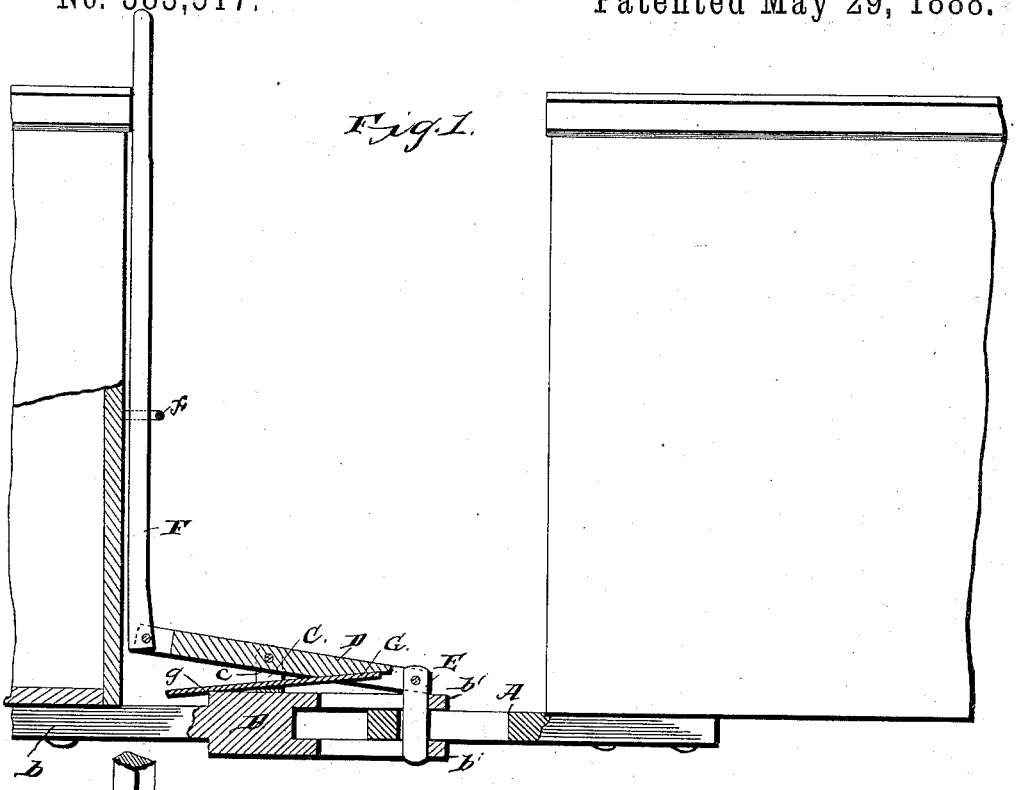
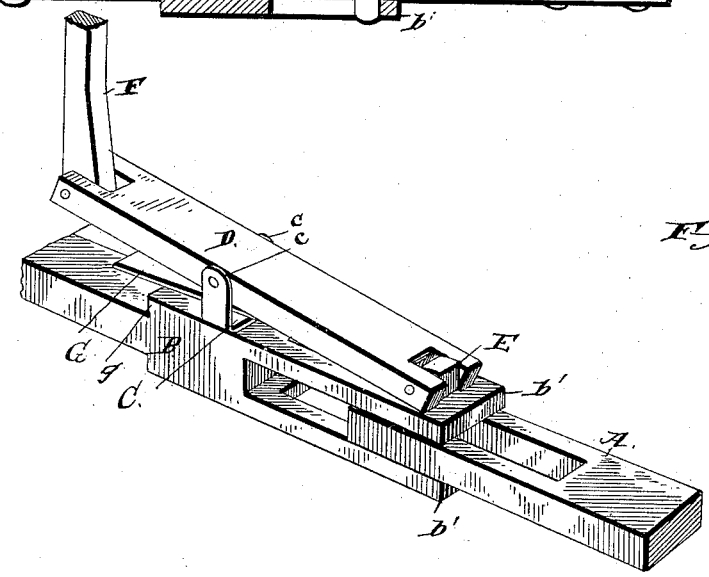


Fig. 2.



WITNESSES.

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JAMES HUSTON FIELDS, OF LEBANON, TENNESSEE.

CAR-COUPLING.

SPECIFICATION forming part of Letters Patent No. 383,517, dated May 29, 1888.

Application filed March 29, 1888. Serial No. 269,019. (No model.)

To all whom it may concern:

Be it known that I, JAMES HUSTON FIELDS, a citizen of the United States, residing at Lebanon, in the county of Wilson and State of Tennessee, have invented a new and useful Improvement in Car-Couplers, of which the following is a specification.

The invention relates to improvements in car-couplers of the link-and-pin variety, the object being to uncouple from the top of the cars; and it consists in the construction and novel combination of parts hereinafter described, and pointed out in the appended claims.

In the accompanying drawings, Figure 1 represents an end view of two cars with the coupler attached thereto. Fig. 2 represents a perspective view of the coupler detached.

Referring to the drawings by letter, A designates a link secured by bolts to and projecting beyond the end of a car, the bolts passing through its shank inward from its slot or opening; and B designates a double or bifurcated link, the shank *b* of which is bolted to the end of a second car in such position that the link A can pass between the upper and lower arms *b'* *b'* of the link B.

C is a bracket secured transversely to the top of the link B a suitable distance therein, and having at its ends the vertical arms *c c* at the sides of the link, between which arms is journaled centrally the vibratory lever D, having both ends bifurcated.

E is a swinging pin having its upper end pivoted in the bifurcation of the outer arm of the lever and hanging down through the opening in the two links, which openings are sufficiently long to permit the lower end of the pin to swing upward and inward from out them.

F is a vertical rod pivoted at its lower end in the bifurcation of the inner arm of the lever D, and passing thence, up through a directing-staple, *f*, secured to the side of the car, to a suitable distance above the top of the latter.

G is a leaf-spring secured at its outer end to the lower surface of the outer arm of the lever D adjacent to the bifurcation therein, and passing thence inward. The inner end of said spring is free, and it rides upon the upper shoulder, *g*, of the link B, so that it acts to depress the outer arm of the lever D and retain the pin in the openings of the links. When the two cars approach, the link A enters between the two arms of the link B, and, striking the pin, forces the same upward and inward until its opening registers with the openings of the link B. The pin then swings down through the opening of both links and couples the cars.

To uncouple the cars, the brakeman on top of the car to which the link B is secured pushes down on the rod F, depressing the inner arm of the lever D, and consequently lifting the pin and releasing the link A. Upon releasing the rod F the spring G returns the pins into the openings of the links B.

Having described my invention, I claim—

1. In a car-coupling, the combination of the single-armed link secured to the end of a car, the bifurcated link secured to the facing end of a second car, and having an upper and a lower arm provided with longitudinal elongated registering pin-openings, the swinging pin hanging normally through the openings in the bifurcated link, and means, substantially as described, whereby the pin may be lifted out of said openings from the top of the adjoining car, substantially as specified.

2. In a car-coupler, the combination of the single-armed link secured to the end of a car, the bifurcated link having similar upper and lower arms and secured to the end of a second car, the vibratory lever journaled at its center between the arms of a bracket secured to the top of the bifurcated link inward from the pin-openings therein, the pin pivoted to the end of the outer arm of said lever at its upper end and hanging down through the pin-openings in the bifurcated link, and the rod with its lower end pivoted to the end of the inner arm of the vibratory lever and rising thence through a guide-staple to a suitable distance above the top of the car to which the bifurcated link is secured, substantially as specified.

3. In a car-coupler, the combination of the link A, secured to the end of a car, with the bifurcated link B, secured to the end of a second car, and having the similar upper and lower arms *b'*, the bracket C, secured to the upper surface of the bifurcated link, the lever D, journaled at its center between the arms *c* *c* of said bracket, the swinging pin E, pivoted at its upper end to the outer arm of said lever,

the rod F, pivoted at its lower end to the inner arm of the lever and rising through the staple *f*, secured to the end of the car, to a suitable distance above the top of the latter, and the spring G, secured to the under surface of the outer arm of the lever D, having its inner end free and riding on the shoulder *g* of the bifurcated link, substantially as specified.

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

JAMES HUSTON FIELDS.

Witnesses:
J. W. SIMMONS,
J. W. BRITTON.