(No Model.)

J. L. MONASMITH.

CAR COUPLING.

No. 401,198. Patented Apr. 9, 1889.

Fig. 1.

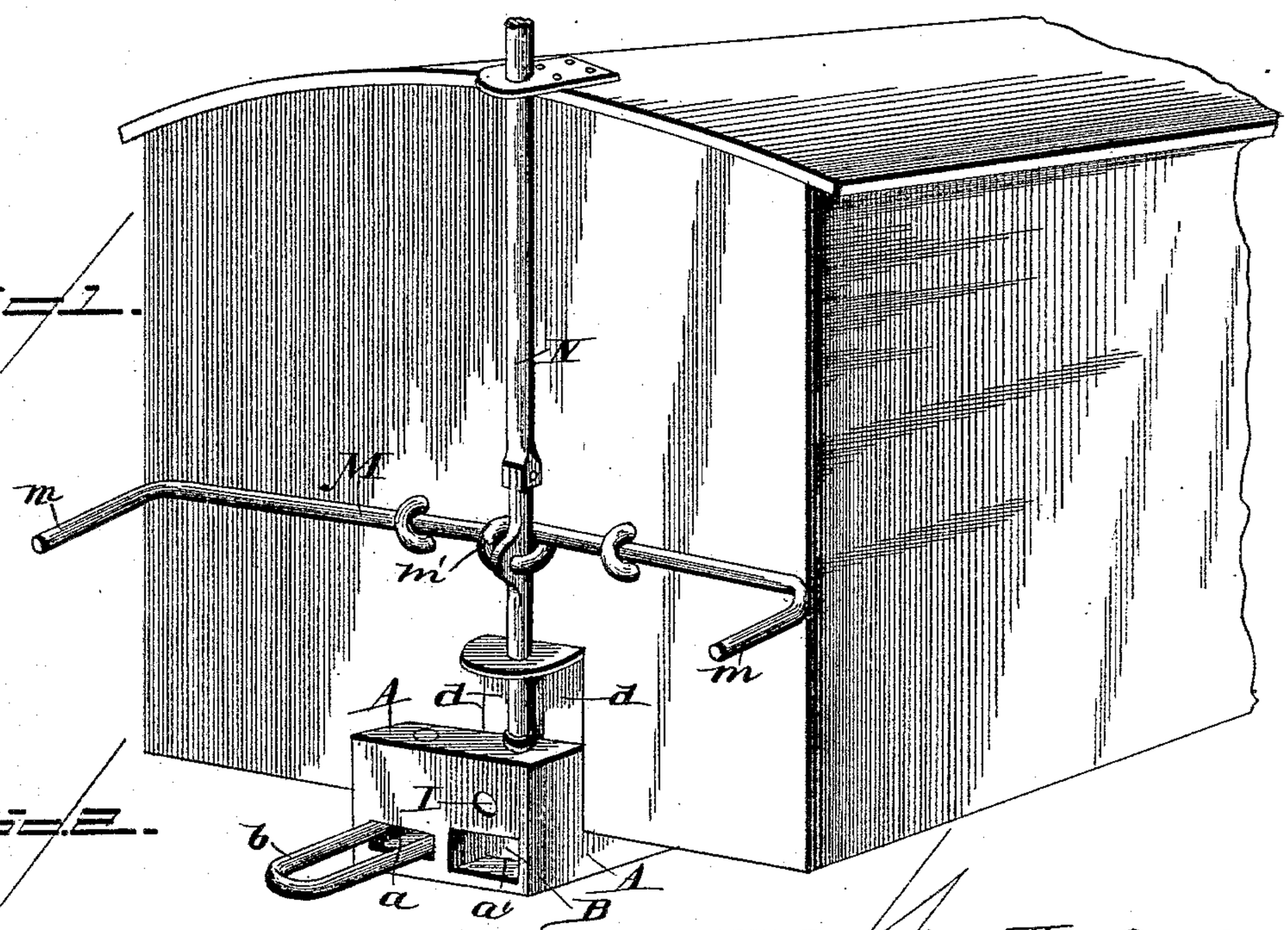


Fig. 2.

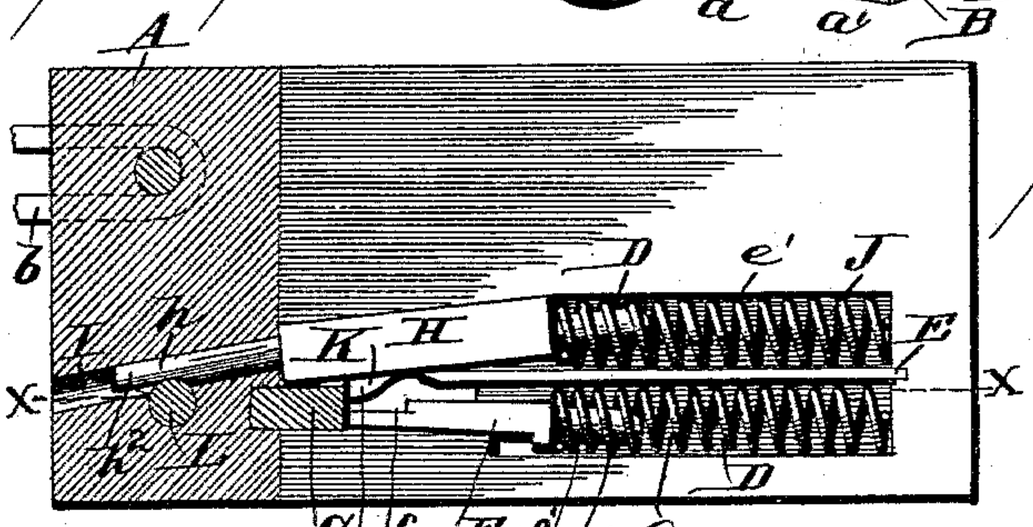


Fig. 4.

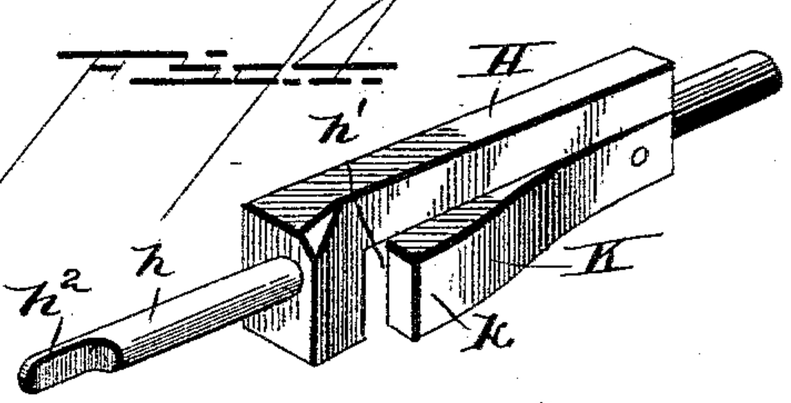


Fig. 3.

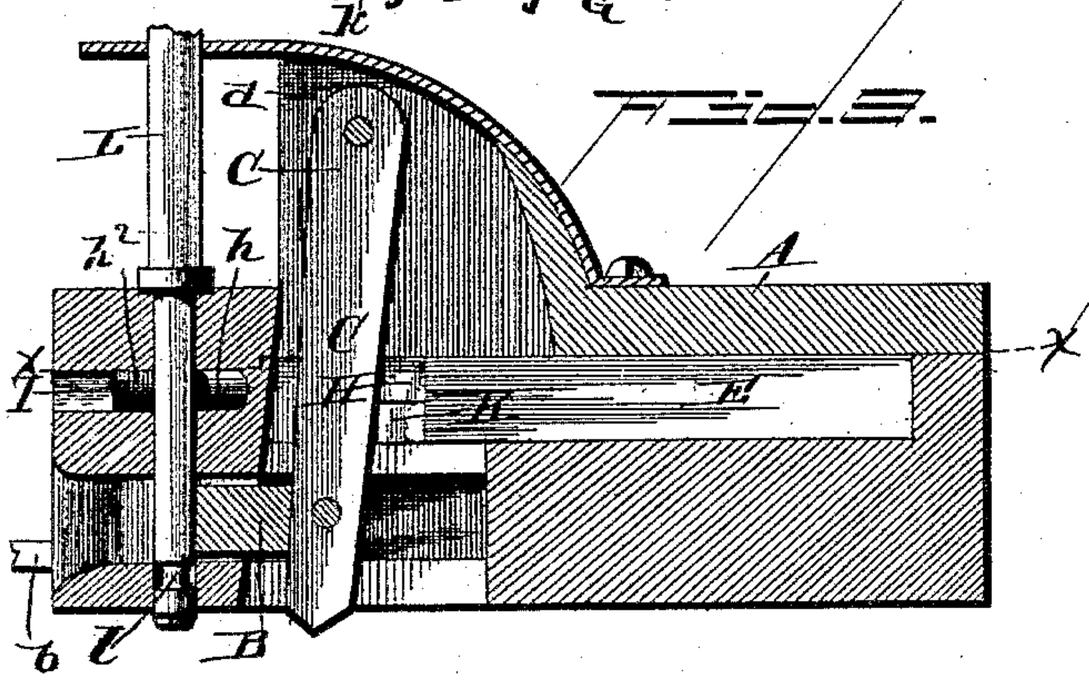
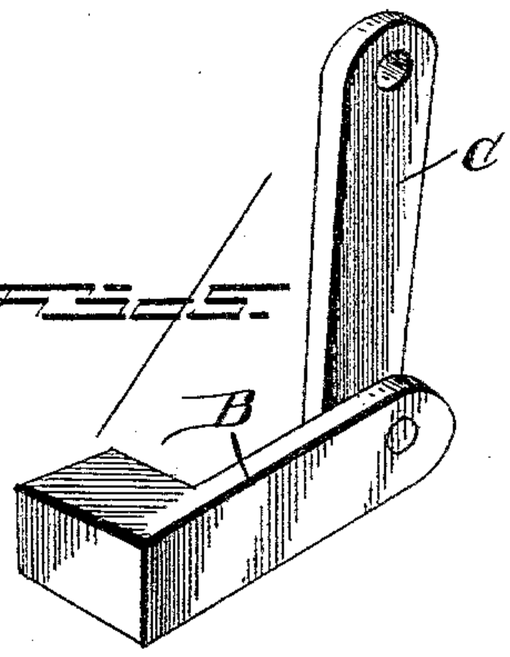


Fig. 5.



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JOEL LEE MONASMITH, OF FORMOSO, KANSAS.

CAR-COUPLING.

SPECIFICATION forming part of Letters Patent No. 401,198, dated April 9, 1889.

Application filed September 26, 1888. Serial No. 286,428. (No model.)

To all whom it may concern:

Be it known that I, JOEL LEE MONASMITH, a citizen of the United States, residing at Formoso, in the county of Jewell and State of Kansas, have invented certain new and useful Improvements in Car-Couplings; and I do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to the letters and figures of reference marked thereon, which form a part of this specification.

This invention relates to car-couplings which are automatic in their operation, and which can be uncoupled from either side or the top of the car.

The improvement consists in the novel features of construction and combination of parts, hereinafter more fully described, claimed, and shown in the annexed drawings, in which—

Figure 1 is a perspective view of one end of a car embodying my invention; Fig. 2, a horizontal section of the coupling on an enlarged scale; Fig. 3, a vertical longitudinal section on the line X X of Fig. 2; Fig. 4, a perspective view of the pin-supporting bar, and Fig. 5 a perspective view of the impact-block and the lever connected therewith.

Each end of the car will be provided with a coupling of like construction, and to simplify matters only one end of a car and one coupling is shown in the drawings.

The draw-bar A has a double head or two link-receiving recesses, *a* and *a'*. The recess *a* receives the link *b*, which is held therein in any desired manner. The recess *a'* is deeper than the recess *a* and receives the impact-block B, which is placed therein and which is pivotally connected with the lower end of the lever C, that extends vertically through the draw-bar, and is pivoted at its upper end between the standards or lugs *d*. The chamber D in the rear of and above the recess *a'* is divided by the partition E into two longitudinal compartments, *e* and *e'*, the partition not extending quite to the end of the chamber, so that the two compartments *e* and *e'* have communication at one end. The bar F, arranged in the compartment *e* and having its front end fitted in the lever C and provided with a notch, *f*, in its side, has the spring G interposed between its rear end and the rear wall of the compartment, said spring being fitted on the reduced end *f'* of the bar F. The pin-supporting bar H, placed in the compartment *e'*, has its front end, *h*, reduced and projected into an opening, I, and has a spring, J, fitted between its rear end and the rear wall of the said compartment *e'*. The under side of the bar H is recessed at *h'*, and across one side of this recess is arranged the spring K, which is secured thereto at one end, the free end *k* of the spring being widened to extend laterally and project within the path of the lever C. The front end of the reduced portion *h* is still further reduced to form the projection h^2, which engages with and supports the coupling-pin L, that works vertically through the draw-bar. The coupling-pin L has an annular groove, *l*, near its lower end, in which the end h^2 fits when the said pin is elevated. The shaft M, journaled on the front of the car, has its ends *m* bent at right angles to form a lever to be grasped when elevating the pin, and has its middle portion provided with the arm *m'*, which engages with the coupling-pin. The vertical rod N, passing to the top of the car, has its lower end engaged with the coupling-pin.

The operation of the coupling is as follows: The coupling-pin being elevated is supported by the end or projection h^2 of the bar H, fitting in the groove *l* therein. When the cars are run together, the link *b* of one car enters the recess *a'* of the draw-bar of the other car, and striking the impact-block forces it in against the tension of the spring G. As the block B moves in the lower end of the lever C likewise moves in, and, engaging with the spring J, carries the bar H in with it and disengages its end h^2 from the pin L, which, being free, falls and engaging with the link couples the cars. To uncouple the cars, operate the shaft M from either side of the car or the rod M in such a manner as to elevate the coupling-pin, which, when sufficiently lifted, will be engaged by the bar H and supported until required to again couple the cars.

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

1. In a car-coupling, the combination, with the draw-bar and the coupling-pin, of the im-

pact-block, the vertical lever C, pivoted at its upper end and engaging with the said impact-block at its lower end, and the pin-supporting bar adapted to be engaged by the said lever C, and having its front end extended and adapted to engage directly with the said coupling-pin, substantially as and for the purpose described.

2. In a car-coupling, the combination, with the draw-bar, the impact-block, and the lever C, of the bar F, the spring G, the bar H, arranged parallel with the bar F and adapted to be engaged by the lever C, and the spring J, substantially as described.

3. In a car-coupling, the combination, with the draw-bar, the impact-block, the lever C, and the spring G, of the bar H, having its front end reduced and provided with the projection h^2, the spring K, having its front end extended within the path of the lever C, and the spring J, substantially as and for the purpose described.

4. In a car-coupling, the combination of the draw-bar having the chamber D, the partition E, dividing the chamber into two compartments, the bar F and the spring G in one compartment, the bar H and the spring J in the other compartment, the spring K on bar H, the impact-block, and the lever C, substantially as described.

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

JOEL LEE MONASMITH.

Witnesses:
MARY E. ALTHOUSE,
ANNIE E. ALTHOUSE.