

J. CHAPMAN.
Car-Coupling.

No. 198,349.

Patented Dec. 18, 1877.

Fig. 1.

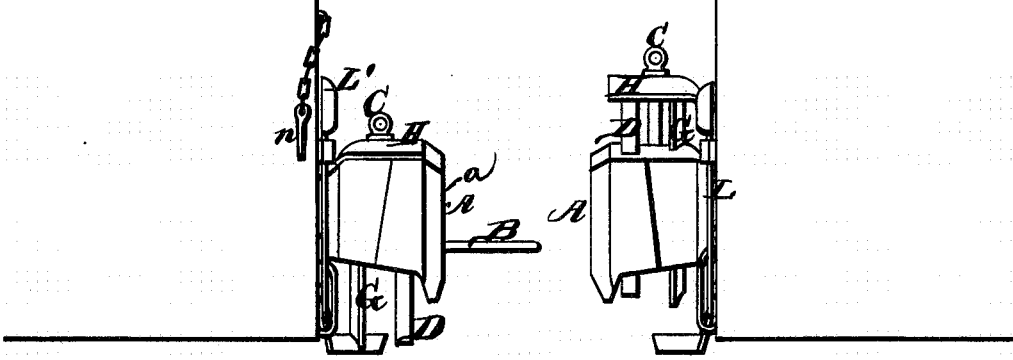


Fig. 2.

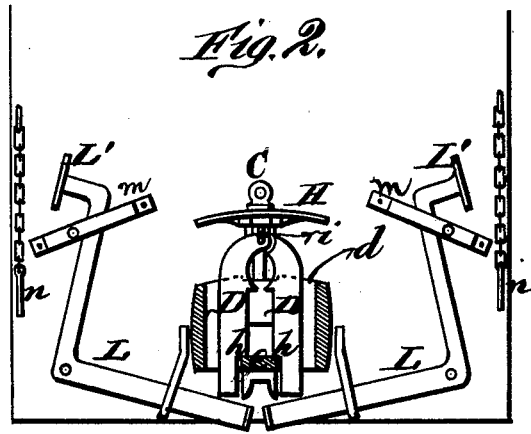
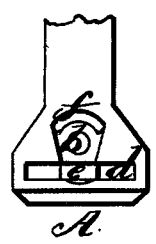


Fig. 3.



WITNESSES
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JACOB CHAPMAN, OF WEST BAY CITY, MICHIGAN.

IMPROVEMENT IN CAR-COUPINGS.

Specification forming part of Letters Patent No. **198,349**, dated December 18, 1877; application filed July 7, 1877.

To all whom it may concern:

Be it known that I, JACOB CHAPMAN, of West Bay City, in the county of Bay and State of Michigan, have invented a new and valuable Improvement in Car-Coupling; and I do hereby declare that the following is a full, clear, and exact description of the construction and operation of the same, reference being had to the annexed drawings, making a part of this specification, and to the letters and figures of reference marked thereon.

Figure 1 of the drawings is a representation of my car-coupling as applied. Fig. 2 is a plan view, and Fig. 3 is a detail, of the same.

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

The annexed drawings, to which reference is made, fully illustrate my invention.

A represents the draw-head, having a mouth at *a* for the entrance of the coupling-link B. It has also the usual pin-hole *b* for the passage of the coupling-pin C. In front of this pin-hole is a vertical mortise, *d*, transversely across the head, extending through both top and bottom of the same. At the bottom, in the center of this mortise, is, however, left a plate, *e*, to form a stop for two swinging arms or brackets, hereinafter described. Back of the pin-hole *b* is a curved slot or mortise, *f*, running vertically through the draw-head.

In the slot *f* is inserted a curved bar, G, the front side of which is concave, as shown, and this bar is, at its upper end, attached to a cap, H, of such size as to completely cover the draw-head and the various openings therein, thus excluding all snow and ice. To the under side of this cap are hung two arms or brackets, D D, which pass down through the mortise *d* in the draw-head. The upper ends of these brackets are curved inward and halved to overlap each other, and united to the cap by a staple, *i*, or its equivalent, passing through said overlapping ends. This construction causes the brackets to hang inclined toward each other. On the inner edges of these brackets are formed shoulders or offsets *h h*, as shown. The coupling-pin C passes through a hole in the cap H, corresponding with the pin-hole *b* in the draw-head.

By raising the cap H to a suitable height the brackets D D will turn inward, so that their lower shoulders *h h* rest upon the plate or stop *e* in the draw-head, which stop thus supports the brackets, cap, bar G, and the coupling-pin. When the cars, now, are brought together the link B, held in the opposite draw-head, enters this draw-head and passes between the brackets D D, forcing the same outward, and thus releasing them from the stop *e*, and allowing them, with the cap, bar, and coupling-pin, to fall down, the pin entering the link and coupling the cars. The curved bar G holds the link in proper position for coupling the cars.

For the purpose of bringing the cars together without coupling them, as is often necessary, an elbow-lever, L, is pivoted to the front of the car on each side of the draw-head, one arm of said lever extending under the same, and having its end turned so as to be under the lower end of the bar G. The other arm of each lever passes upward through a bracket, *m*, and has the end turned to form a handle, L'. By means of either of these levers L the bar G is pushed upward, carrying with it the cap, brackets, and coupling-pin, as above described. If a pin, *n*, is now passed through the bracket *m*, as shown, the lever is held stationary, and when the link enters the draw-head the parts will not fall down, as they do in coupling the cars.

What I claim as new, and desire to secure by Letters Patent, is—

1. In a car-coupling, the gravitating brackets D D, formed with the shoulders *h*, in combination with a stop, *e*, in the bottom of the draw-head, for the purposes herein set forth.

2. The combination of the cap H, curved bar G, brackets D D, and coupling-pin C with the draw-head A, all substantially as and for the purposes herein set forth.

In testimony that I claim the above I have hereunto subscribed my name in the presence of two witnesses.

JACOB CHAPMAN.

Witnesses:

AMOS HEWITT,
JOHN GOLDEN,