(No Model.)

W. S. MINER & R. F. FORE.

CAR COUPLING.

No. 342,625. Patented May 25, 1886.

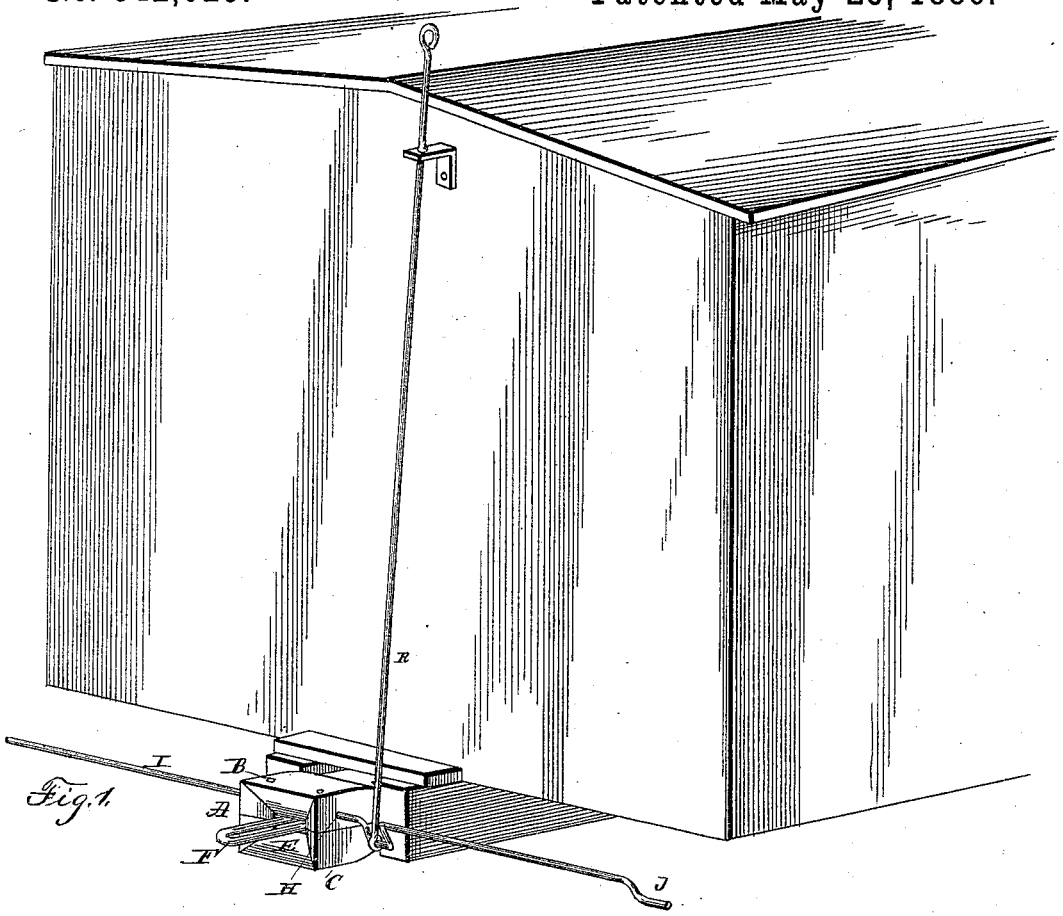


Fig. 1.

Fig. 2.

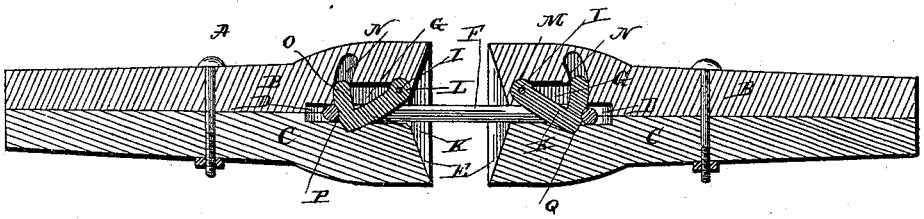
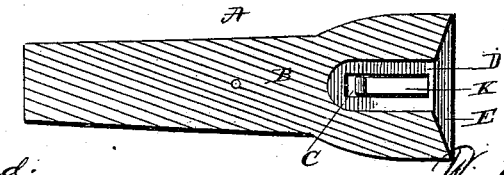


Fig. 3.



WITNESSES

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UNITED STATES PATENT OFFICE.

WINFIELD S. MINER AND ROBERT F. FORE, OF TURNEY STATION, MO.

CAR-COUPLING.

SPECIFICATION forming part of Letters Patent No. 342,625, dated May 25, 1886.

Application filed March 26, 1886. Serial No. 196,625. (No model.)

To all whom it may concern:

Be it known that we, WINFIELD S. MINER and ROBERT F. FORE, both residents of Turney Station, in the county of Clinton and State of Missouri, have invented certain new and useful Improvements in Car-Couplings; and we do hereby declare that the following is a full, clear, and exact description of the invention, which will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, which form a part of this specification, and in which—

Figure 1 is a perspective view of one end of a railway-car provided with our improved car-coupling. Fig. 2 is a longitudinal vertical sectional view of two draw-heads coupled together, and Fig. 3 is a horizontal sectional view of one draw-head.

Similar letters of reference indicate corresponding parts in all the figures.

Our invention has relation to that class of car-couplings in which a block or latch is pivoted at one end within the recess in the draw-head, projecting downward into the recess with its rear end, so that a link inserted into the draw-head may push the latch upward and slip under the same, when the latch may again drop down with its rear end projecting into the link; and it consists in the improved construction and combination of parts of such a car-coupling, as hereinafter more fully described and claimed.

In the accompanying drawings, the letter A indicates the draw-head, which may be secured to the car in any suitable manner, and which is composed of two halves—an upper half, B, and a lower half, C—suitably connected by bolts or similar means; or it may be cast solid in one part, if desired. The recess D, opening from the flaring mouth E of the draw-head, is of sufficient size to receive the end of the link F, the said end of the link fitting snugly within the recess; and the upper side of this recess is formed with a longitudinal vertical recess, G, the forward end of which is formed with a transverse perforation, H, passing through the sides of the draw-head and having a transverse shaft, I, journaled in it, the ends of which shaft are formed with cranks J or handles, by means of which the shaft may be rocked. The block or latch K is secured with its forward end upon this shaft, and the forward end of this latch is rounded, as shown at L, so as to fit into the correspondingly-rounded forward end, M, of the recess, the convex end of the latch rocking in the concave bearing formed in that end of the recess. The rear portion of the recess extends farther upward than the forward portion, and the rearwardly-facing side N of this enlargement is segmental convex, so as to fit against the forwardly-facing edge of the upwardly-projecting rear portion, O, of the latch, forming a guide for the said face and for the latch, which may swing with the rear end up into the enlargement of the recess. The rear edge of the latch is cut away and rounded at its lower end, as shown at P, for the purpose of bearing perfectly against the inner curve of the rear end of the link, and the lower rear corner of the latch rests in a notch, Q, in the bottom of the link-recess, bearing with the inclined lower edge against the inclined bottom of the notch. Rods R are pivoted to the cranks or arms at the ends of the shaft and extend to the top of the car, where they are suitably guided and provided with means for holding them in a raised position, so that the coupling may be operated as well from the top of the car as from the sides, the ends of the shafts projecting to the sides of the cars. It will be seen that the strain upon the latch from the link will be divided between the bearing at the forward end of the recess in the draw-head, removing the strain from the shaft, as well as upon the convex face of the enlargement of the recess and upon the notch in the bottom of the recess, so that a number of portions of the draw-head will be subjected to the strain, and so that the latch itself will only have a small portion of the strain to bear directly. The shaft being free from any strain will move freely in its bearing, and the rounded and cut-away portion at the rear corner of the latch will admit of the latch being raised from out of the link without any great resistance, allowing the link to be released from the draw-head while draft is exerted upon the same, admitting of great ease in making running switches with cars at the rear end of a train.

The link of this coupling may be used with any coupling using either link and latch or using a pin and link, the end of the link out of the draw-head being shaped to fit the different couplings, and as the latch drops into the link by its own weight and has no attachment with-

in the recess acting in conjunction with it, the coupling is not liable to get out of order or to break.

Having thus described our invention, we claim and desire to secure by Letters Patent of the United States—

In a car-coupling, the combination of a draw-head having a longitudinal recess in its forward end, a recess in the bottom wall of said longitudinal recess, and an upwardly-curved recess in its top wall, and a latch pivotally secured at the upper front end of said longitudinal recess by means of a transverse shaft having cranks at its outer ends, the rear end of said latch being rounded and provided with an upwardly-curved arm or enlargement upon its upper side, said enlargement being provided near its middle portion with a notch.

In testimony that we claim the foregoing as our own we have hereunto affixed our signatures in presence of two witnesses.

WINFIELD S. MINER.
ROBERT F. FORE.

Witnesses:
WM. MOORE,
J. A. SCRUGGS.