(No Model.)

H. C. TRASK.

CAR COUPLING.

No. 514,291. Patented Feb. 6, 1894.

Fig. 1.

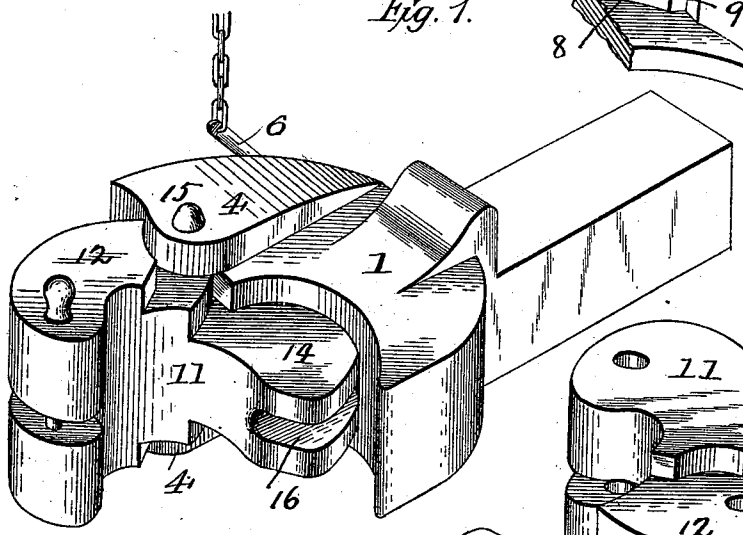


Fig. 7.

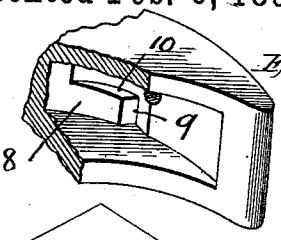


Fig. 2.

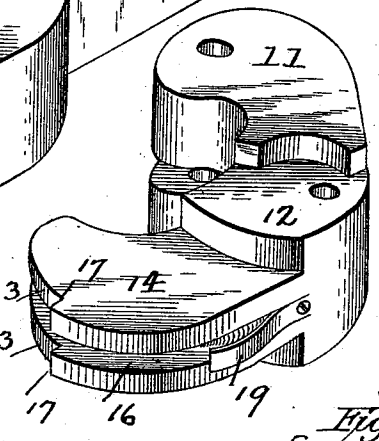


Fig. 3.

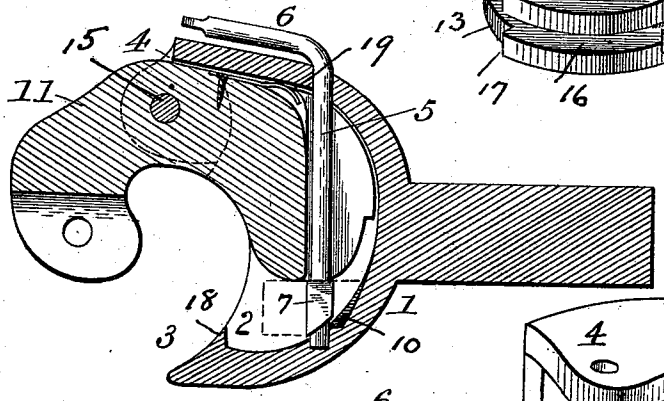


Fig. 6.

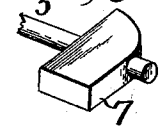


Fig. 5.

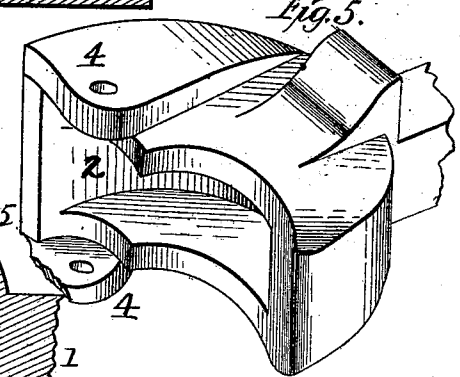
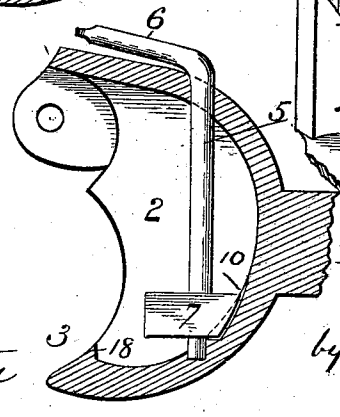


Fig. 4.



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HENRY C. TRASK, OF VIENNA, MAINE.

CAR-COUPLING.

SPECIFICATION forming part of Letters Patent No. 514,291, dated February 6, 1894.

Application filed October 11, 1893. Serial No. 487,843. (No model.)

To all whom it may concern:

Be it known that I, HENRY C. TRASK, a citizen of the United States, and a resident of Vienna, in the county of Kennebec and State of Maine, have invented certain new and useful Improvements in Car-Couplings; and I 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.

My invention relates to what is known as twin-jaw car-couplers and its object is to provide an improved construction of the same, which shall possess superior advantages with respect to simplicity in construction and efficiency in use.

My invention consists in the novel construction and combination of parts hereinafter fully described and claimed.

In the accompanying drawings:—Figure 1 is a perspective view of a car-coupler constructed in accordance with my invention, the movable jaw being shown open or in position for coupling. Fig. 2 is a similar view of the movable jaw, detached. Fig. 3 is a horizontal sectional view of the coupler, the movable jaw being closed. Fig. 4 is a horizontal section of the draw-head, the movable jaw being detached. Fig. 5 is a perspective view of the stationary jaw. Fig. 6 is a detail perspective view of the coupling pin and its plate. Fig. 7 is a detail perspective view of the stationary jaw.

In the said drawings the reference-numeral 1 designates a draw-head adapted to be secured to a car in any suitable manner, and is formed with a curved recess 2, at its front end, which end is curved, as shown, forming a stationary jaw 3. The draw-head is also formed with aligned lugs 4, having holes or apertures for the passage of a pivot-pin. Journaled in the draw-head is a transverse, rotatable coupling-pin 5, one end of which passes through one of the walls of the draw-head and is formed or provided with a crank 6. The opposite end of this pin is seated in a recess in the draw-head, and is formed with a plate 7, the lower side of which is curved to conform to the shape of the draw-head. The draw-head is formed with a lug or projection 8, forming double shoulders 9 and 10, at right angles to each other, with which the upper and lower portions of said plate, respectively, engage.

The numeral 11 designates the movable jaw comprising the curved knuckle 12 and curved tail-piece 14, which tail-piece is also formed with a bevel 13. This jaw is pivoted to the draw-head by means of a pivot-pin, 15, passing through the apertures in the lugs 4, and also through a hole or aperture in the jaw. The tail-piece 14, is curved as shown, and is formed with a slot 16, to receive the coupling-pin when the jaw is locked as hereinafter explained. It is also cut away on its outer edge forming shoulders 17, which engage with a lug 18 formed near the end of the stationary jaw so as to limit the movement of the tail-piece, when the movable jaw is opened. The tail-piece at its rear side is provided with a flat spring 19, which bears against the coupling-pin and acts as a buffer or bumper for the movable jaw.

The operation is as follows: The parts being in the position shown in Fig. 1, the coupling-pin is turned so that the plate, 7, will be on a horizontal plane, in line with the slot in the tail-piece and the curved portion resting against the shoulder 10, by which its movement is limited. As a car to be coupled, provided with a similar coupling, approaches the draw-head, the knuckles of the movable jaws will strike the curved stationary jaws and be directed inward where they will strike the tail-pieces forcing the latter inward and turning the movable jaws on their pivots, so that the knuckles will interlock with each other. As the tail-pieces are thus forced inwardly the coupling pins will engage in the slots 16 in their peripheries, so as to permit the tail-pieces to be seated entirely within the recesses in the draw-heads. The coupling-pins are now turned so as to bring the plates 7 into a vertical position, causing them to engage with the bevels 13 and securely hold the tail-pieces and lock the movable jaws. The shoulder 9 limits the movement of the plates in this direction. A reverse movement of the coupling-pin will release the tail-pieces.

Having thus described my invention, what I claim is—

1. In a car-coupler, the combination with the draw-head, having a curved recess and a stationary jaw, and the rotatable coupling-pin formed or provided with a plate at its inner end, of the movable jaw pivoted to said draw-head, comprising a knuckle and a curved tail-piece formed with a slot and a bevel, substantially as described.

2. In a car-coupler, the combination with the draw-head formed with a stationary jaw, a curved recess and the double shoulders at right angles to each other, and the rotatable coupling-pin provided with a plate at its inner end adapted to engage with said shoulders, of the pivoted jaw having a knuckle and a curved tail-piece having its end beveled and formed with a peripheral slot, substantially as described.

3. In a car-coupler, the combination with the draw-head having a stationary jaw, provided with a shoulder near its end, and formed with a curved recess and with double shoulders at right angles to each other, of the pivoted jaw having a knuckle, a curved tail-piece having a slot and peripheral shoulders, the spring secured to said tail-piece, and the rotatable coupling-pin having a plate at its inner end, substantially as described.

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

HENRY C. TRASK.

Witnesses:
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M. T. HIGGINS.