

(No Model.)

R. WILSON.

CAR COUPLING.

No. 384,732.

Patented June 19, 1888.

Fig. 1.

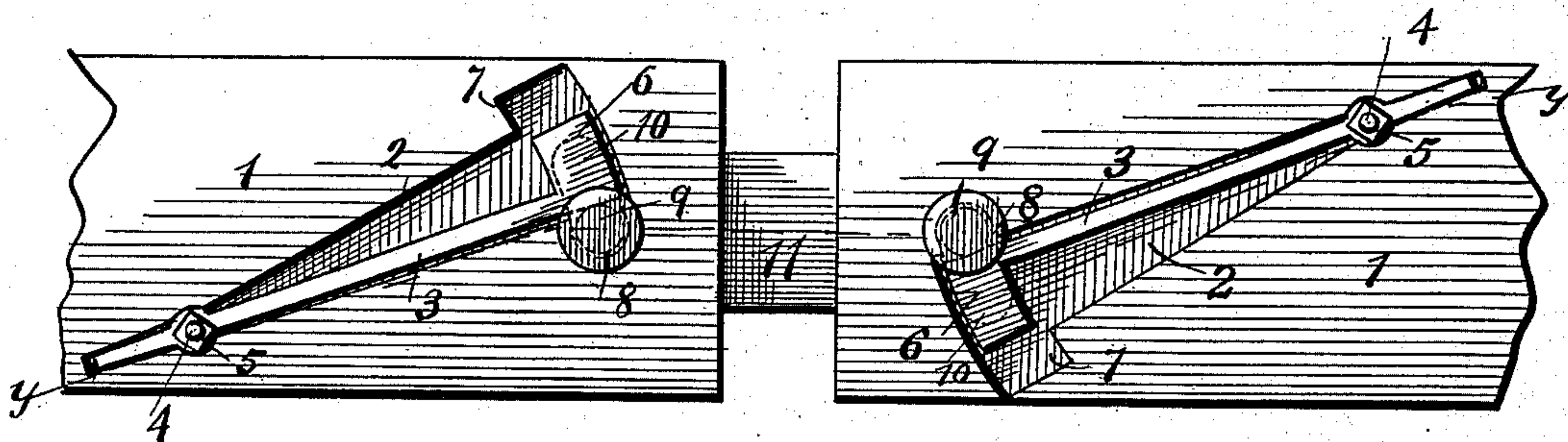


Fig. 2.

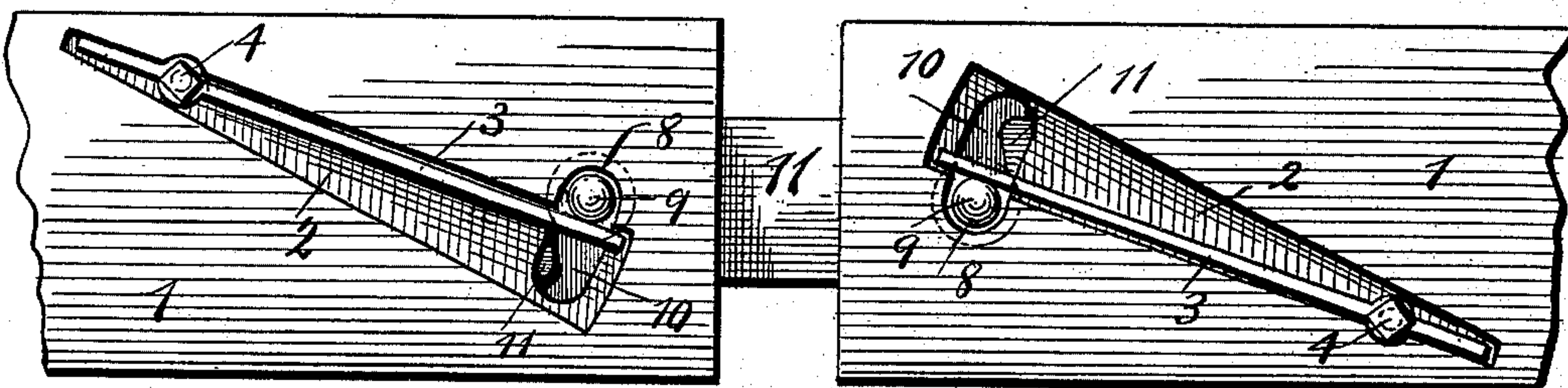


Fig. 3.

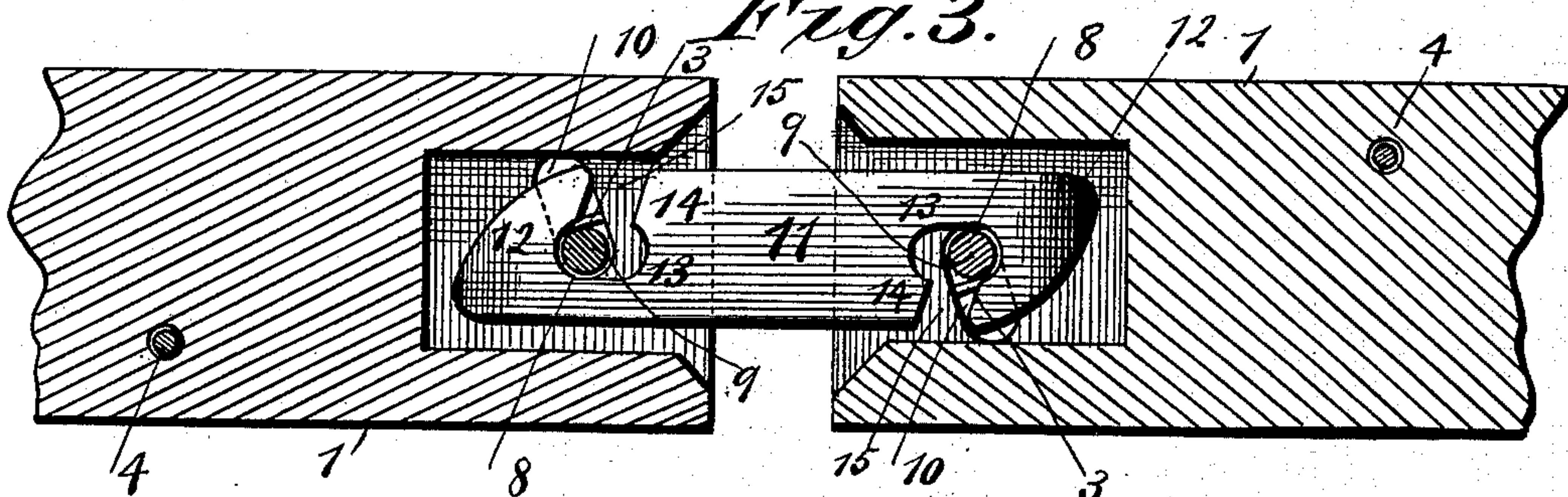
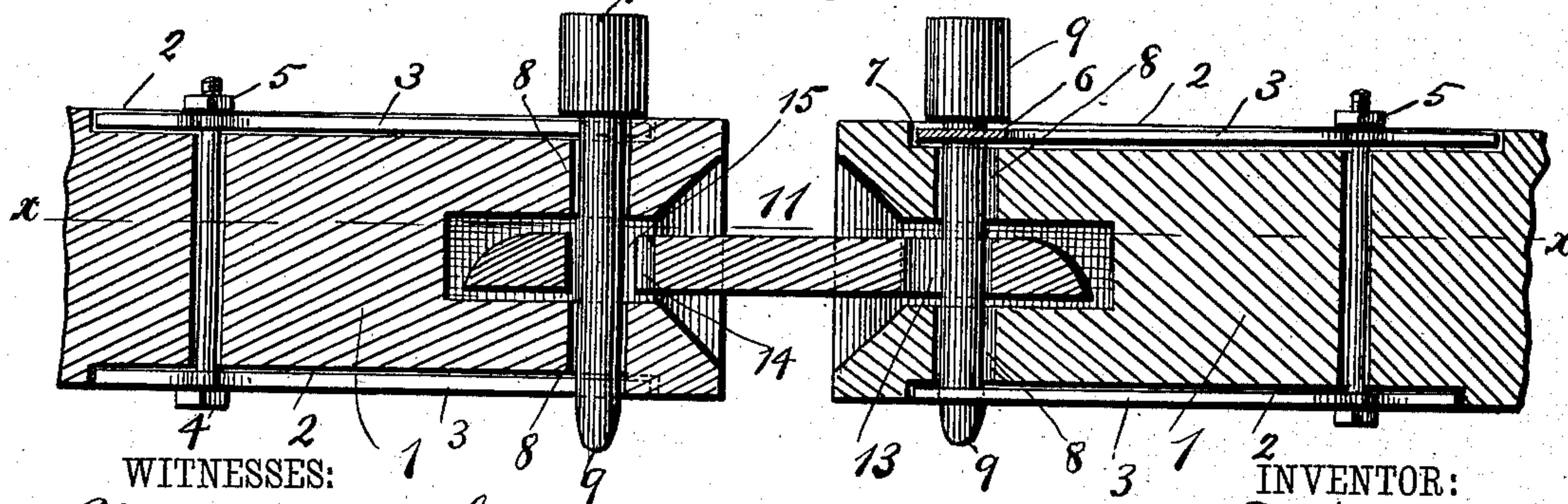


Fig. 4.



WITNESSES:

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CAR-COUPLING.

SPECIFICATION forming part of Letters Patent No. 384,732, dated June 19, 1888.

Application filed February 1, 1888. Serial No. 262,633. (No model.)

To all whom it may concern:

Be it known that I, ROBERT WILSON, of Grubville, in the county of Jefferson and State of Missouri, have invented a new and Improved Automatic Car-Coupler, of which the following is a full, clear, and exact description.

This invention relates to car-couplers, and has for its object to provide a car-coupler which may be automatically coupled, and which can be used with the ordinary form of link, if desired.

The invention consists in a car-coupling constructed and arranged as hereinafter described and claimed.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar figures of reference indicate corresponding parts in all the views.

Figure 1 is a plan view of the device, showing two draw-heads partly broken away and coupled together. Fig. 2 is a view similar to that in Fig. 1, in reverse position. Fig. 3 is a section through the line *xx* in Fig. 4; and Fig. 4 is a vertical longitudinal section of the device on the line *yy*, Fig. 1.

In the construction of this device two ordinary draw-heads, 1 1, are employed, formed with a triangular recess, 2, in the top and bottom thereof, in each of which is located a spring-arm, 3, said arms being pivoted in said recesses by a connecting-bolt, 4, extending through the draw-head and secured in place by a nut, 5. The end of the upper spring-arm 3 is provided with an elongated portion or head, 6, which is adapted to fit into a recess, 7, of the slot 2. The coupling-pin hole 8 is located at one corner of the slots 2, as shown, so that when the coupling-pin 9 rests in the perforation 8 the free end of the spring-arm 3 bears against said coupling-pin and holds it in position in the perforation 8. The perforation 8 is formed with an extended recess, 10, into which the pin 9 is permitted to be moved from the perforation 8, which recess is normally covered by the head 6 of the arm 3.

In order to automatically couple the draw-heads 1, a peculiar form of coupling, 11, is employed, which consists of a bar having beveled ends 12, with elongated slots 13, having open-

ings 14, the slots 13 and beveled portion 12 forming a hook at each end of the bar 11, adapted to engage the coupling-pins 9.

In operation, a coupling-pin 9, having been placed in the perforations 8 in one of the draw-heads 1, is held therein by the spring-arms 3 bearing against it. The coupling-link 11 is then pushed into the recess 15 of the draw-head 1, and the beveled portion 12, bearing against the pin 9, forces the latter into the recess 10, and permits the end of the link 11 to pass by the coupling-pin 9 until the open recess 14 comes opposite the pin 9, when the latter is thrown into the extended slots 13 by means of the action of the spring-arms 3, and thereby engages the hooked end of the link 11. The link 11 then being held in engagement with one of the draw-heads 1, upon the coming together of the draw-heads, the opposite beveled end of the link 11 will bear against the coupling-pin 9, placed in the perforation 8, and be thrown into engagement therewith in the same manner as already described with the other end of the coupling-link 11. By means of this construction cars may be readily coupled together without any handling of the link or coupling-pins, except to place the coupling-pins in position.

The coupling-pin 9 and spring-arms 3 may be moved back by any suitable device, so as to release coupling-pin 9 from engagement with link 11, and thereby uncouple the draw-heads. It is obvious that an ordinary coupling-link may be used with the pins 9; but in that case there will be no automatic coupling of the parts.

I do not confine myself to the use of two spring-arms 3, as one only may be employed to act upon the coupling-pin, the invention comprehending, broadly, a coupling-pin, a draw-head having a laterally-extended perforation, and a spring-actuated arm to hold the coupling-pin in its perforation.

The specific construction and arrangement of parts herein described may be varied without departing from the essence of the invention.

By means of a coupler of this description cars may be easily and securely coupled in a simple and effective manner.

Having thus fully described my invention, I claim as new and desire to secure by Letters Patent—

1. In a car-coupling, the combination, with
5 the draw-head having the lateral perforation
8 extending vertically through it, of the vertically-arranged coupling-pin 9, and spring arranged in a horizontal plane and bearing normally on said pin for the purpose of holding
10 it, and links having hooks and lying in a horizontal plane, substantially as shown and described.

2. In a car-coupling, the combination, with
15 a draw-head having a recess in its upper and lower sides and a vertical coupling-pin slot or perforation, of spring-actuated arms located in such recesses and adapted to bear against

and hold a coupling-pin in position at one end of the said slot, substantially as described.

3. In a car-coupling, the draw-head 1, having
20 recesses 2 at top and bottom, the top recess having extended portion 7, and the perforation 8, with lateral recess 10, located at the corner of said slots 2, and the spring-actuated
25 arms 3, secured by means of the bolt 4 and nut 5, in combination with the link 11, having hooked ends formed with the beveled portion 12, elongated slots 13, and the openings 14, and coupling-pin 9, substantially as described.

ROBERT WILSON.

Witnesses:

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