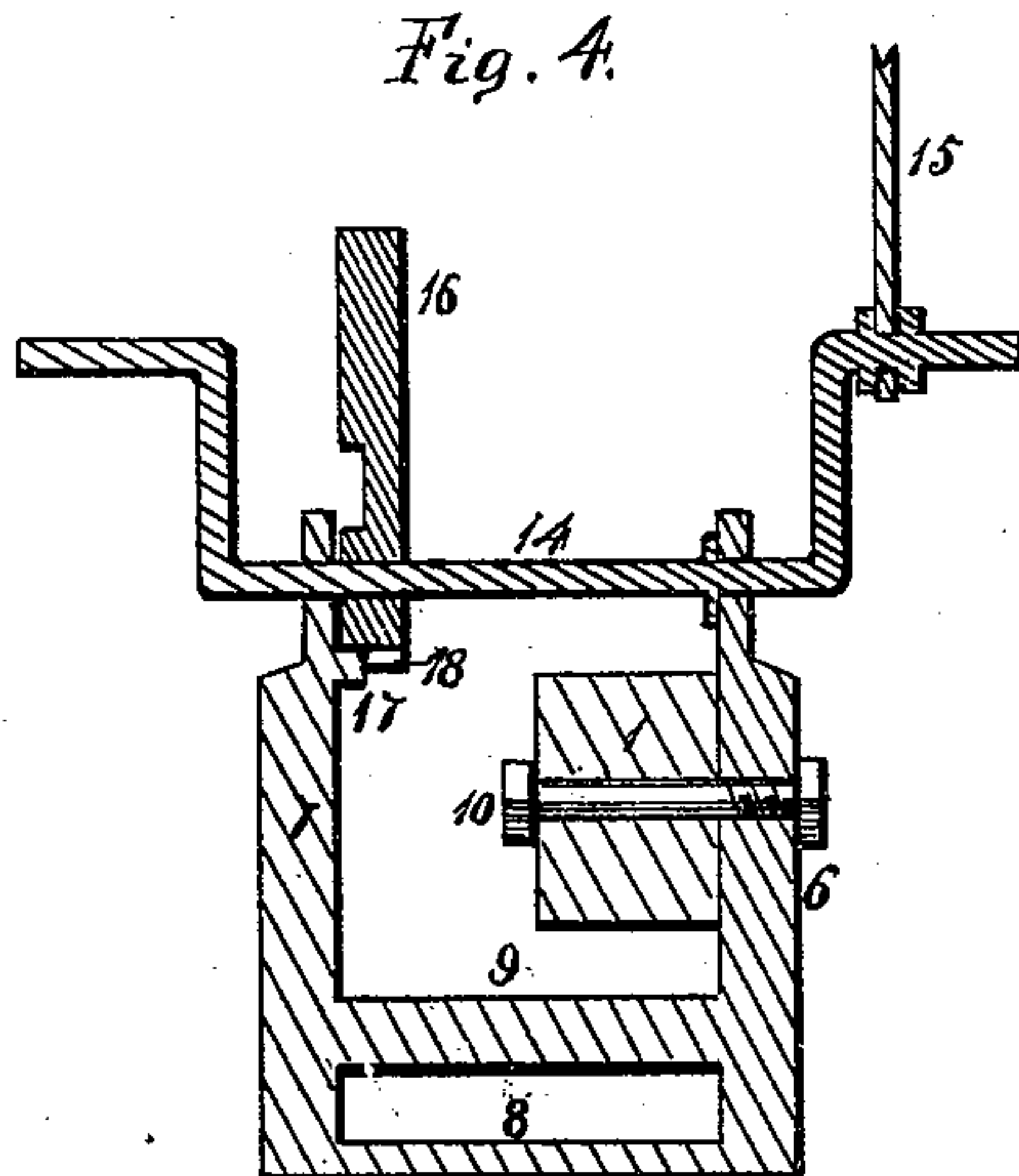
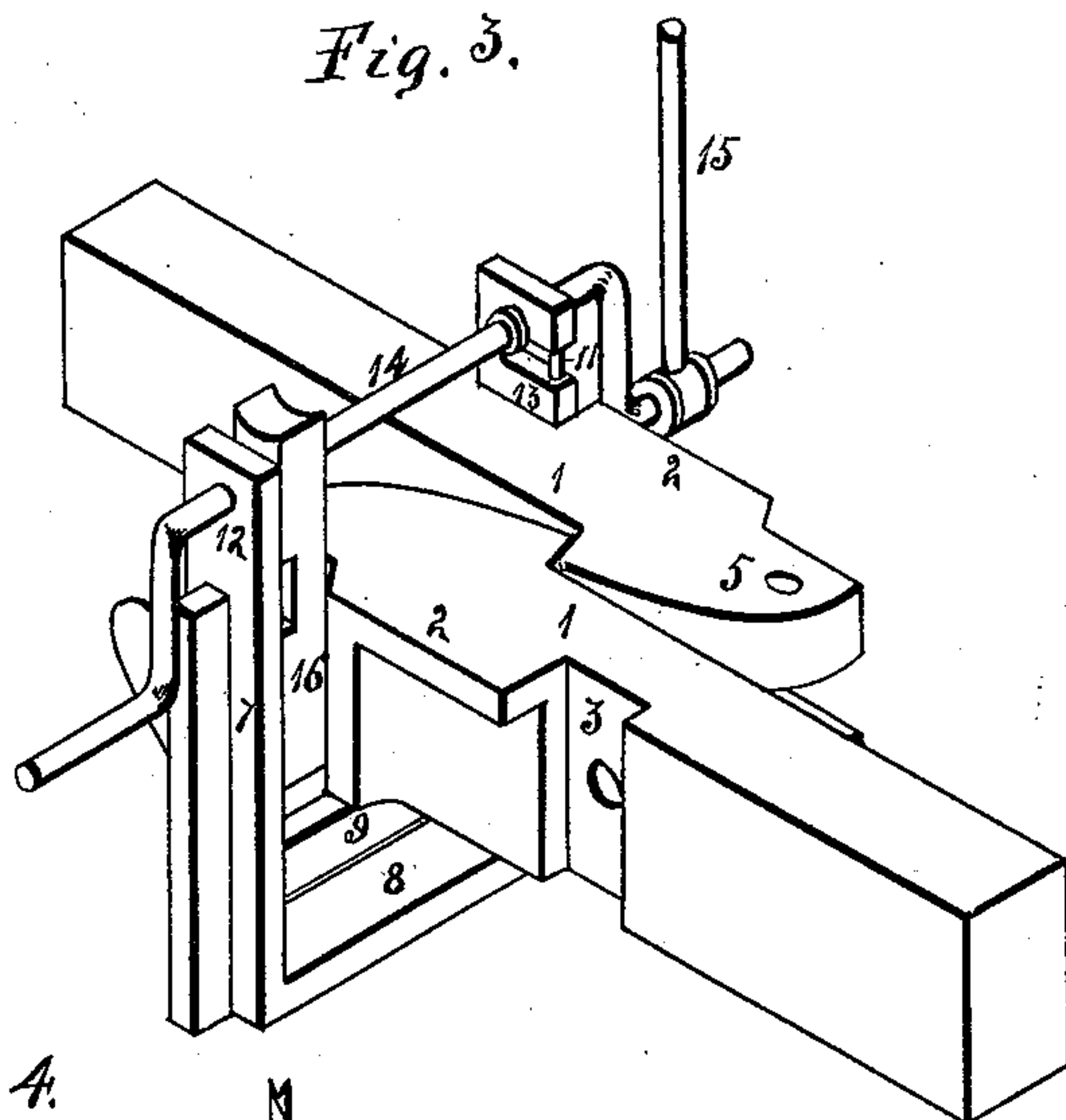
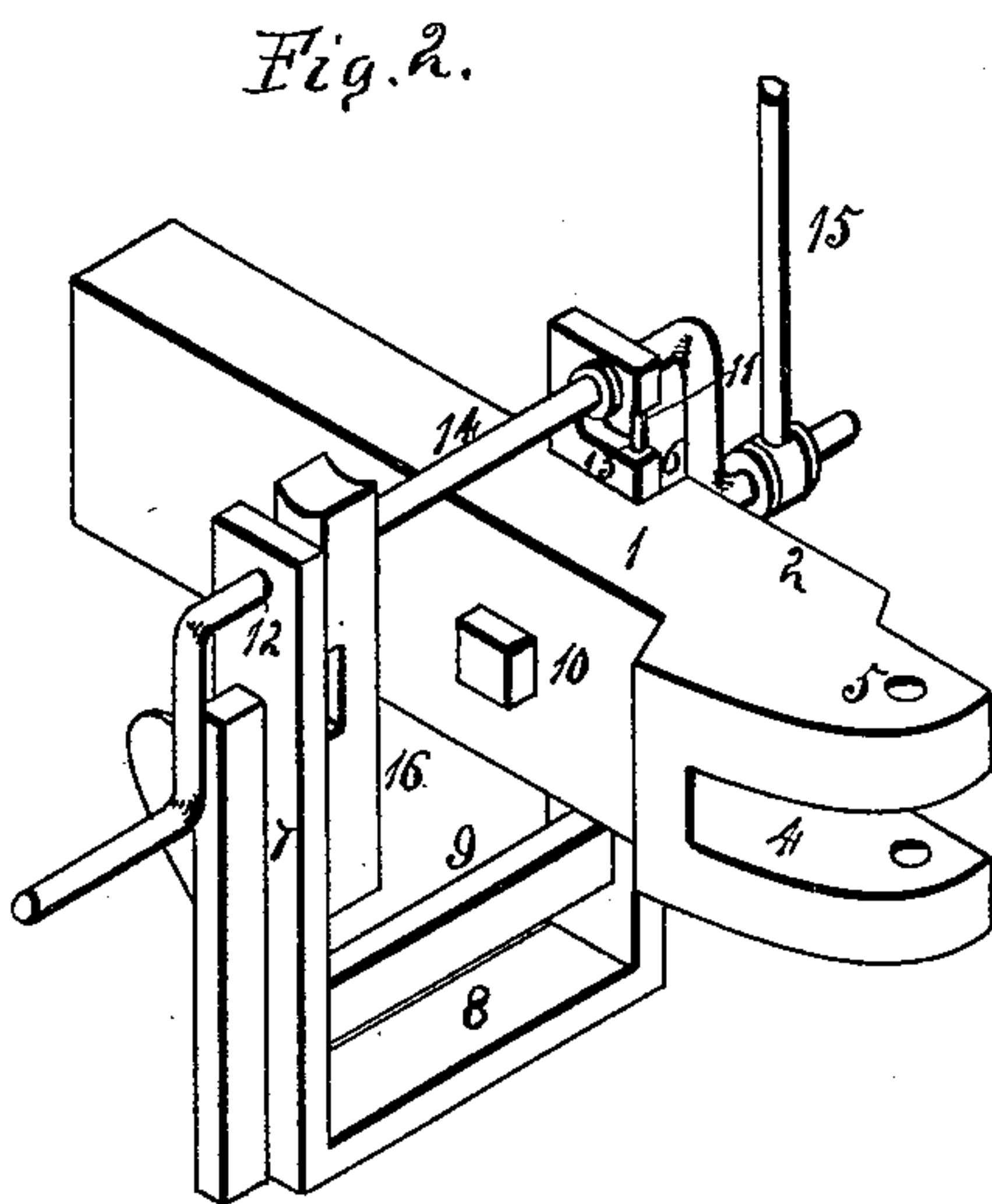
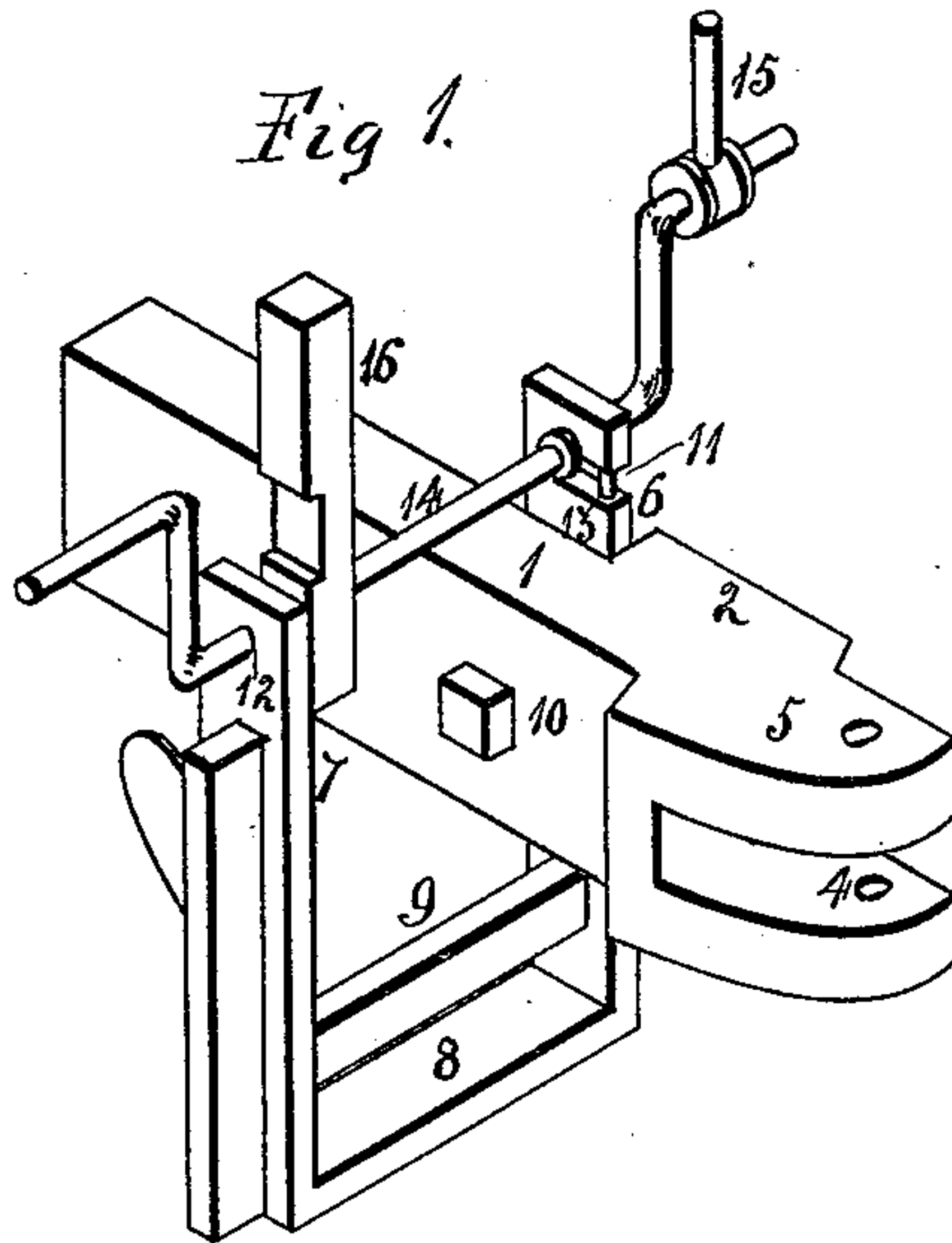


(No Model.)

C. A. ANDERSON.
CAR COUPLING.

No. 477,399.

Patented June 21, 1892.



Witnesses:
E. Behel.
L. L. Miller

Inventor:
Charles A. Anderson
By A. O. Behel
Att.

UNITED STATES PATENT OFFICE.

CHARLES A. ANDERSON, OF ROCKFORD, ILLINOIS.

CAR-COUPLING.

SPECIFICATION forming part of Letters Patent No. 477,399, dated June 21, 1892.

Application filed February 17, 1892. Serial No. 421,894. (No model.)

To all whom it may concern:

Be it known that I, CHARLES A. ANDERSON, a citizen of the United States, residing at Rockford, county of Winnebago, State of Illinois, have invented certain new and useful Improvements in Car-Couplers, of which the following is a specification.

The object of this invention is to produce an automatic coupling for railway-cars which, though as strong and reliable as the link-and-pin coupling, is comparatively free from the danger incident to the operation of the latter. Another feature of superiority of this coupling over those in common use lies in the great saving of time in its manipulation.

In the accompanying drawings, Figure 1 is an isometrical representation of my coupler applied to one of the draw-bars of a railway-car, showing the coupling set not to engage when the adjacent draw-bars are pushed together. Fig. 2 is an isometrical representation of the coupler set to engage when the two adjacent draw-bars come together. Fig. 3 is an isometrical representation of the coupling in engagement. Fig. 4 is a section of the coupling in the position shown in Fig. 1.

In the application of this coupler to a railway-car I first provide for each end of the car a draw-bar 1 of substantially the usual form, excepting the raised portion 2 near the forward end of each bar on its outer side, while the mode of attachment to the car is not different from ordinary couplers. Rearward of the projecting portion 2 I form the vertical channel 3 in the outer side of the draw-bar. The opening 4 and the hole 5 are provided for the use of a link and pin when my improved coupling is placed adjacent to a car fitted with the former style of coupling. Secured in the vertical channel 3 is the first of the two upright bars 6 and 7, which being joined at their lower ends by the bar 8 complete the supporting-frame for the moving parts of the coupler. The brace-bar 9 serves to strengthen and stiffen the free ends of the bars 6 and 7. To hold this supporting-frame fixed in relation to the draw-bar, I secure it thereto by passing the bolt 10 through a hole in the arm 6 and through the draw-bar. In the forward edge of the upper end of the bar 6 I form the recess 11 and in the bar 7 the hole 12, the pin 13 forming a removable closure for the recess

11, holding the crank-bar 14 in position. The crank-bar 14 is provided with a crank at each end, and the one next the bar 6 has a connecting-rod 15 extending to the top of the car, from which point the coupling may be operated.

Adjacent to the bar 7, just within the frame, I secure the arm 16 rigidly to the crank-bar 14, the arm lying in the same place as do the two cranks. A projection 17 from the inner face of the bar 7 engages a notch 18 in the short end of the arm when it is desirable to set the parts not to couple when the draw-bars come together. A projecting wing 19, extending rearwardly from the bar 7, guides the arm into place between the bar and the draw-head.

The operation of my coupler is as follows: If it is desired to set the parts so they shall not engage, the crank-shaft 14 is turned either from the ground or the top of the car until the arm stands upright, when the notch 18 in the arm engages the projection 17, extending from the bar 7, which holds it in an upright position and from causing the draw-bars to engage. To set the parts for engagement, the arm is turned downward and allowed to hang beside the arm 7 of the frame. The draw-bar of the approaching car first strikes the inclined face of the heads and the draw-bars spread until the inclined shoulders coincide, when they are forced together, and the arm 16, having been pushed back by the advancing draw-bar, swings forward into its position between the draw-head and the frame. The raised portion 2 holds the arm from displacement. When it is desired to uncouple the cars, the shaft is rotated by the cranks at its ends or by the upwardly-extending coupling-bar from the top of the car and the crank 16 turned into an upright position, when the notch 18 in the pin will engage its projection 17 and hold it in this position.

The notch in the arm has inclining sides, and the bearing for the crank-shaft is somewhat larger than the shaft to allow the arm to be released by simply turning the shaft.

The pin 13 is withdrawn when it is necessary to remove the crank-shaft, which removal is then easily accomplished without displacing the arm from the shaft.

While the drawings show the frame, crank-

shaft, arm, &c., attached to one draw-bar only, it should be understood that each draw-bar is equipped with similar parts.

I claim as my invention—

5 1. A car-coupler having two draw-bars, wedging-heads thereon, an inclined shoulder on each bar, a stop for limiting the lateral movement of the draw-bars, and a pivoted arm capable of being placed between one of the
10 draw-bars and the stop.

2. A car-coupler having two draw-bars, wedging-heads and inclined shoulders thereon, a stop for limiting the lateral movement of the draw-bars, a shaft, and an arm rigidly se-
15 cured thereto, said shaft capable of an oscillatory movement.

3. A car-coupler having two draw-bars, wedging-heads and inclined engaging shoul-

ders thereon, a frame affixed to each draw-bar, a shaft journaled in each frame, and an arm rigidly secured to each shaft, which arms are capable of being placed between the frame and the draw-bar to prevent the lateral movement of the draw-bars. 20

4. A car-coupler having two draw-bars, 25 wedging-heads and inclined engaging shoulders thereon, a frame affixed to one of the draw-bars, a shaft journaled in the frame, an upwardly-extending connecting-rod for the shaft, an arm rigidly affixed to the shaft, a 30 projection from the frame, and a notch in the arm for engaging the projection.

CHARLES A. ANDERSON.

Witnesses:

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