

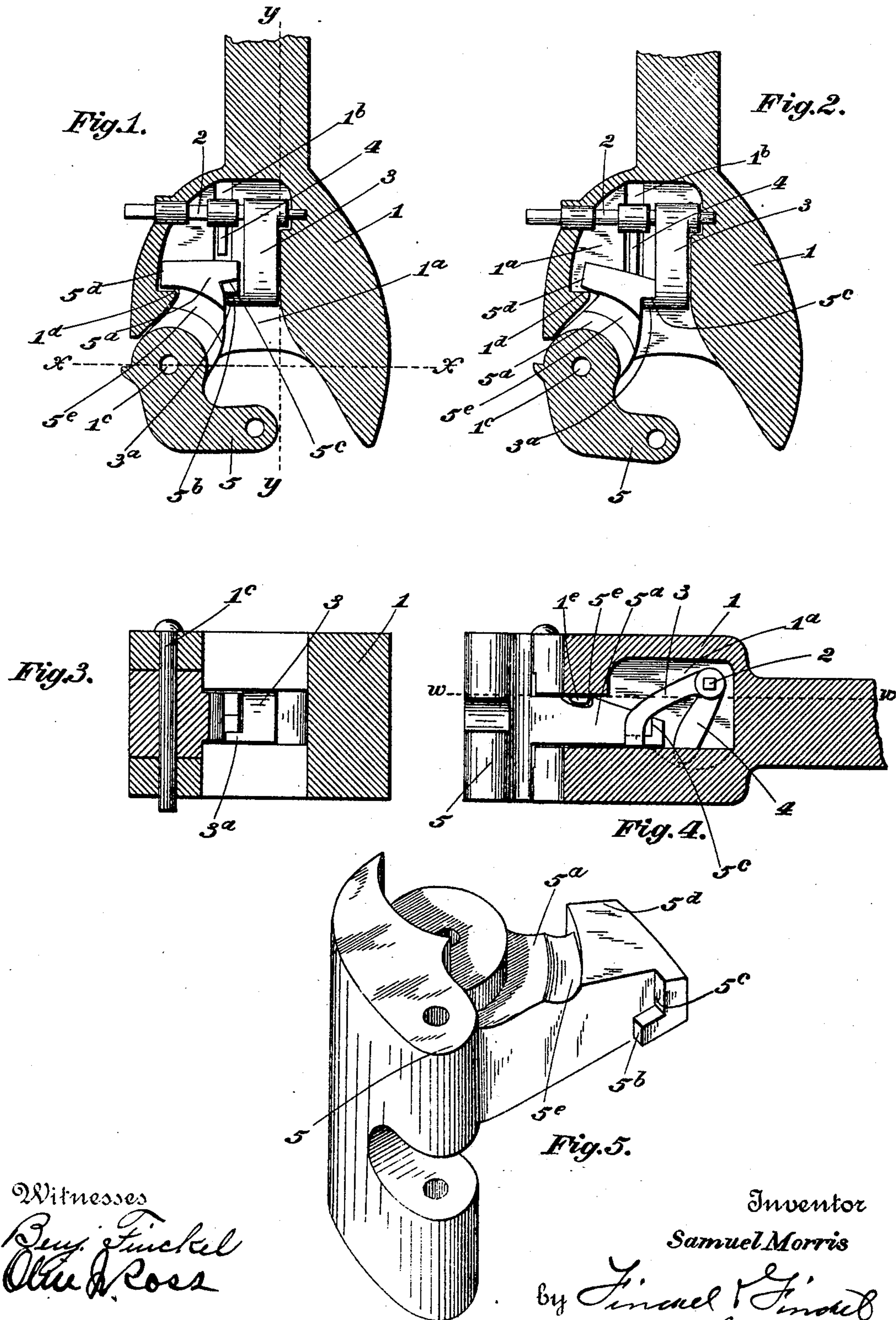
No. 773,153.

PATENTED OCT. 25, 1904.

S. MORRIS.
CAR COUPLING.

APPLICATION FILED APR. 26, 1904.

NO MODEL.



Witnesses
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UNITED STATES PATENT OFFICE.

SAMUEL MORRIS, OF NEWARK, OHIO.

CAR-COUPLING.

SPECIFICATION forming part of Letters Patent No 773,153, dated October 25, 1904.

Application filed April 26, 1904. Serial No. 205,013. (No model.)

To all whom it may concern:

Be it known that I, SAMUEL MORRIS, a citizen of the United States, residing at Newark, in the county of Licking and State of Ohio, have invented certain new and useful Improvements in Car-Couplings; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

The object of this invention is to provide an improved car-coupling adapted for automatic coupling of the cars either on curved or straight tracks.

The invention is embodied in the construction hereinafter described and claimed.

In the accompanying drawings, illustrating an embodiment of the invention, Figure 1 is a horizontal section on the plane *ww*, Fig. 4, looking down, the parts being in their coupling position on a straight track. Fig. 2 is a like section showing the coupling position on a curved track. Fig. 3 is a vertical section on the plane *xx*, Fig. 1, looking toward the draw-head cavity. Fig. 4 is a vertical section on the plane *yy* looking toward the operative devices. Fig. 5 is a perspective, on a magnified scale, of the knuckle.

In the several views, 1 designates the draw-head, which has an appropriate cavity 1^a for the reception of the operative parts. Journaled in the walls of the draw-head and extending through the rear of the cavity at right angles to the axis of the draw-head is a rock-shaft 2, on which is fixed a lock 3, having a lateral projection 3^a, and also fixed on said shaft is a "kicker" 4, consisting of an arm curved around its free extremity. To make room for the operation of the kicker, the floor of the cavity is shown to be recessed, as seen at 1^b.

The knuckle, which is pivoted at 1^c to the draw-head, is made with a coupling exterior jaw 5 and an arm 5^a, that swings into the cavity of the draw-head. The arm 5^a is provided at one side with locking-shoulders 5^b and 5^c, (the former located forward of the latter,) adapted to be engaged by the locking projection 3^a on the lock 3. The opposite side of the arm 5^a is made with a heel 5^d, that reaches in behind an inward projection 1^b at

the mouth of the draw-head when the knuckle is in coupling position. The upper side of the knuckle is made with a groove 5^e, into which projects a stud 1^e in the upper wall of the cavity 1^a.

The operation is as follows: When it is desired to set the parts for automatic coupling, the shaft 2 is turned to lift the lock and operate the kicker to throw the exterior jaw into coupling position. When in this position and the shaft 2 released, the lock will rest on the upper side of the inner arm of the knuckle. If the cars come together on a curved track, the inner arm of the knuckle will be thrown inward only until the projection 3^a engages the shoulder 5^c of the knuckle, as seen in Fig. 2. When the cars run from the curved track onto a straight track, the knuckle will be straightened around so as to allow the projection 3^a to engage the shoulder 5^b, as seen in Fig. 1. If the cars come together in the first instance on a straight track, the lock, of course, will drop at once to the position seen in Fig. 1.

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

1. In a car-coupling, the combination with the draw-head, of the lock pivoted in said draw-head to rock vertically and in the plane of the direction of the draft on the draw-bar, and a horizontally-swinging knuckle having an inner arm with two shoulders, one set forward of the other, and both projecting approximately at right angles from the side of said inner arm, adapted to be engaged by the vertically-rocking lock.

2. In a car-coupling, the combination with the draw-head, of the vertically-rocking lock, a horizontally-swinging knuckle having an inner arm with two shoulders, one set forward of the other, adapted to be engaged by the rocking lock, and a "kicker" to operate said knuckle simultaneously with the operation of the vertically-swinging lock.

In testimony whereof I affix my signature in presence of two witnesses.

SAMUEL MORRIS.

Witnesses:

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JOHN DAVID JONES.