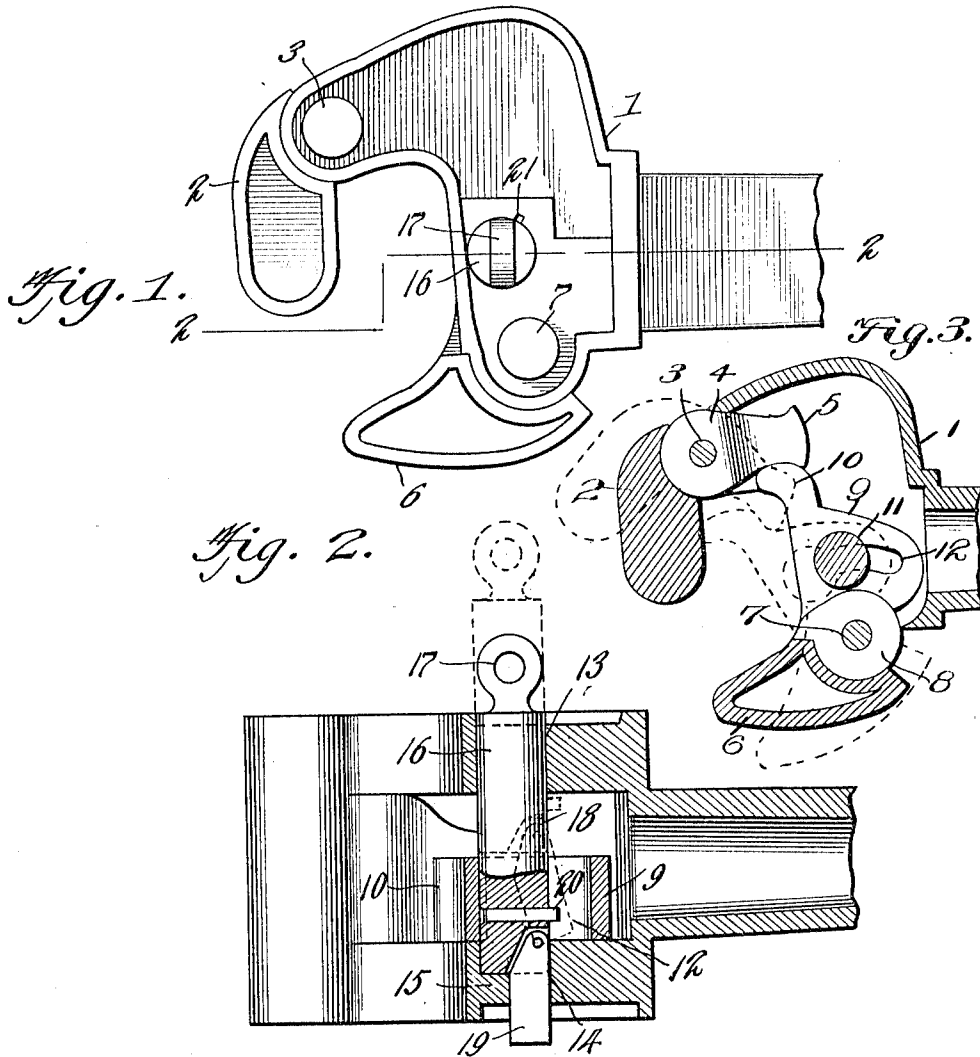


J. R. DEISHER.  
 CAR COUPLING.  
 APPLICATION FILED JULY 15, 1909.

1,079,221.

Patented Nov. 18, 1913.



Inventor

*John R. Deisher,*

Witnesses

*Frank B. Hoffman*  
*N. Allen*

By *Victor J. Evans*

Attorney

# UNITED STATES PATENT OFFICE.

JOHN R. DEISHER, OF POTTSVILLE, PENNSYLVANIA.

## CAR-COUPLING.

1,079,221.

Specification of Letters Patent.

Patented Nov. 18, 1913.

Application filed July 15, 1909. Serial No. 507,788.

*To all whom it may concern:*

Be it known that I, JOHN R. DEISHER, a citizen of the United States of America, residing at Pottsville, in the county of Schuylkill and State of Pennsylvania, have invented new and useful Improvements in Car-Couplers, of which the following is a specification.

The invention relates to an improvement in car couplers, and is particularly directed to a construction which may be set to permit an automatic coupling, and which after such automatic coupling will lock against uncoupling.

The main object of the present invention is the provision of a coupler in which the coupling pin is adapted to be set in a single movement of the cutting lever to arrange the parts of the coupler for the automatic coupling operation, the movement of the lever, as a result of the pin construction, locking the pin in set position against movement other than that induced in the coupling operation.

A further object of the invention is the provision of a coupling pin so constructed that in normal position it will lock the movable jaw and knuckle in coupling position, and when in set or stopped position will release said parts to permit the coupling operation, the initial movement of the jaw in the coupling operation releasing the lock of the stop pin and in turn supporting said pin against movement to coupling position until the jaw has returned to coupling position.

The invention will be described in the following specification, reference being had particularly to the accompanying drawings, in which:—

Figure 1 is a plan of the improved coupler. Fig. 2 is a longitudinal section of the same on line 2—2 of Fig. 1, the coupling pin being shown in set position in dotted outline. Fig. 3 is a horizontal section through the coupler, the jaw and knuckle being shown in open relation in dotted outline.

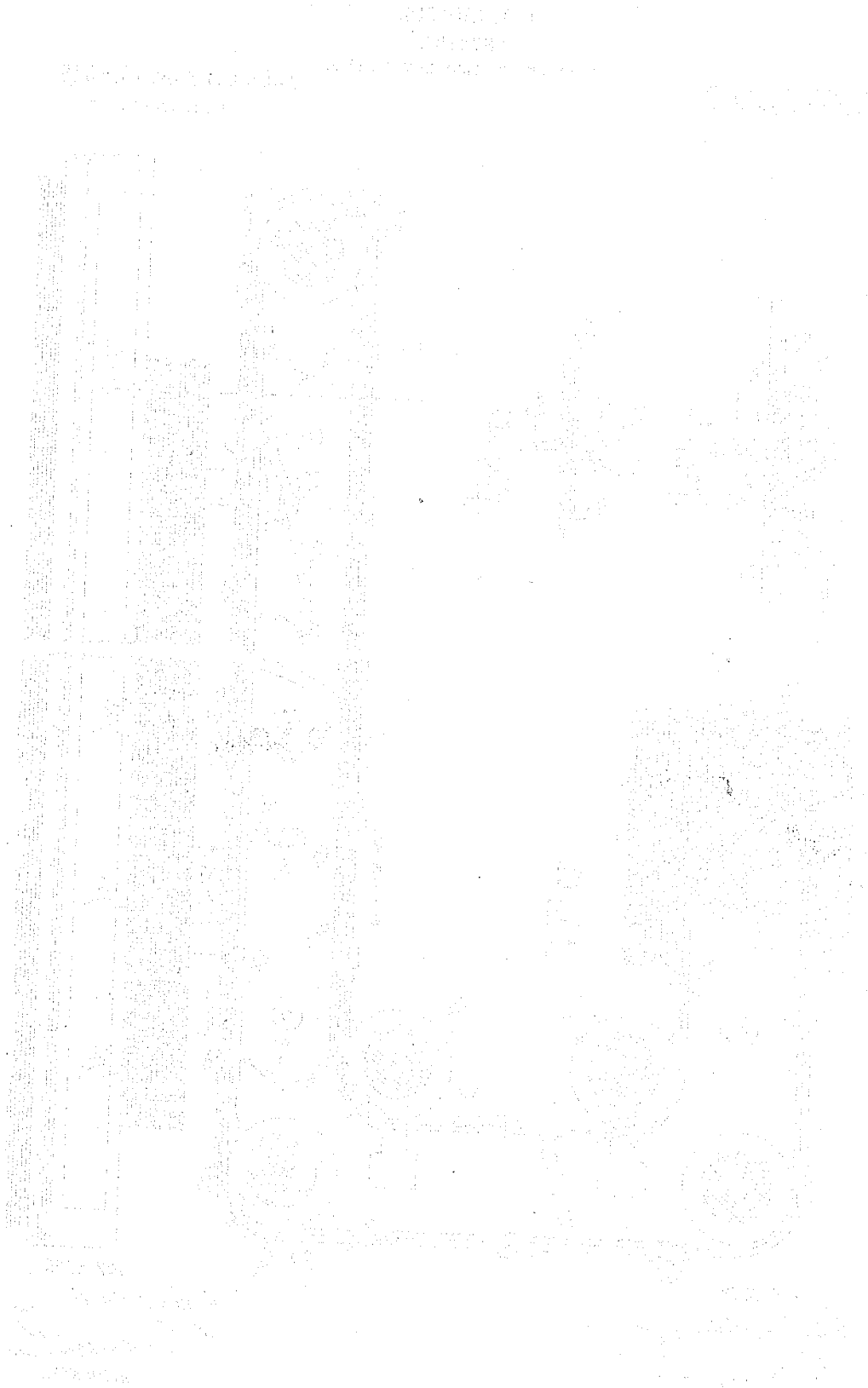
Referring particularly to the accompanying drawings, wherein is shown the preferred details of construction, my improved coupler comprises a head 1, which, aside from the details to be hereinafter noted, is of usual construction. Pivotaly mounted at the usual point in the head is the knuckle 2, the pivot pin 3 of which passes through the knuckle extension 4 and through both

upper and lower plates of the head. The inner end of the extension 4 beyond the pivot 3 is laterally enlarged, as at 5, for a purpose which will presently appear.

Secured to the head in an appropriately opposing position relative to the knuckle is the jaw 6, this jaw in the preferred construction being pivotaly mounted on a pin 7 extending through both plates of the head and through the jaw extension 8, it being understood that both the knuckle and jaw extensions are of such height as to fit in a mechanical manner between the plates of the head without permitting undue play of said parts.

Projecting inwardly from the jaw extension is a section 9, which will hereinafter be termed, the locking plate. The plate is of materially less thickness than the extension 8, and has its lower surface coincident with the lower surface of the extension. The inner edge of the plate adjacent the relatively forward edge is formed with a lip 10 coextensive in height with the thickness of the plate and having its remote or free end extending forwardly with relation to the plate. The outer or remote edge of the lip 10 is designed to bear snugly against the proximate surface of the inner or rear end of the knuckle extension 4 when the parts are in coupled position.

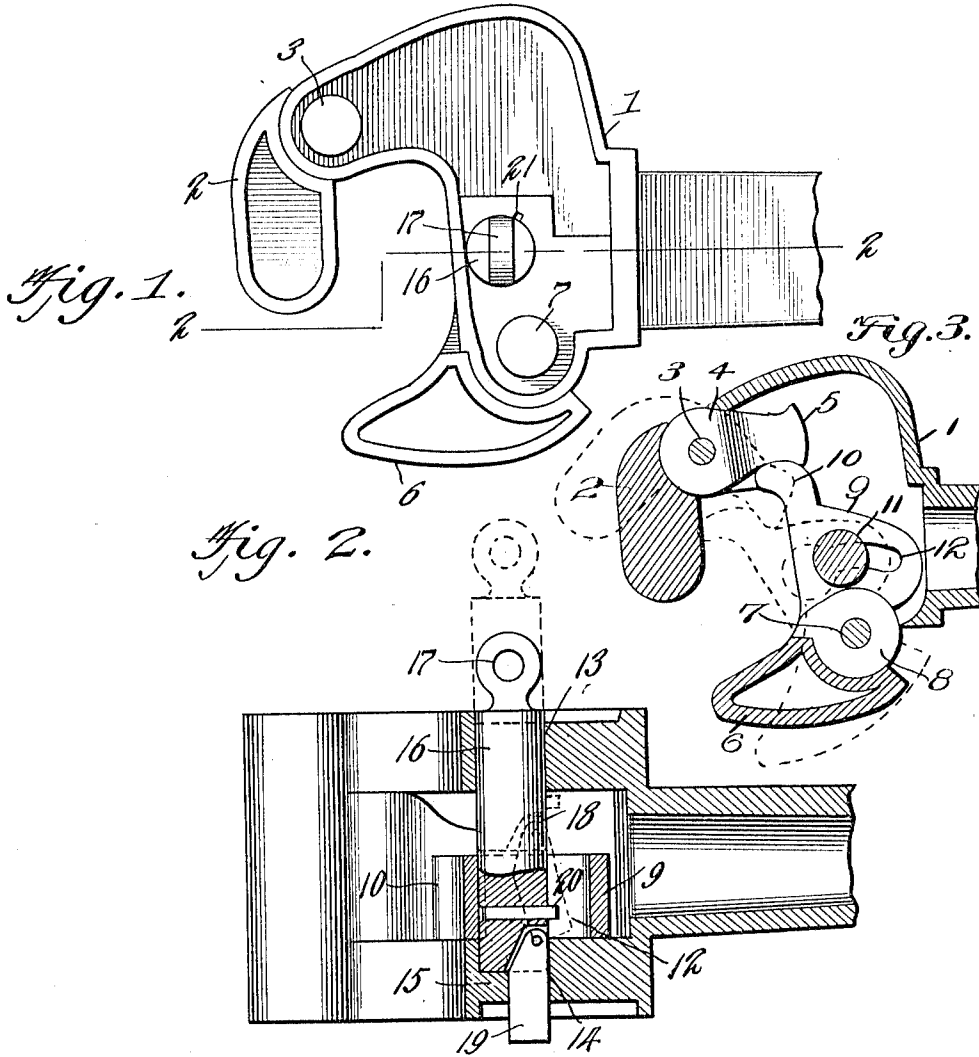
The locking plate 9 at a point approximately in alinement with the longitudinal central line of the draw bar is formed with an aperture or opening 11 extending there-through to receive the coupling pin to be later described. A slotted extension 12 is also formed in the plate in communication with the opening 11, said slot extending rearwardly and on a line concentric with the pivot pin 7 of the jaw. The upper and lower plates of the head are formed with openings 13 and 14 respectively both corresponding in size to the opening 11 in the plate and being in alinement therewith when the jaw 6 is in coupling position. The opening 14 in the lower plate of the head is preferably formed in its forward portion with a transverse abutment 15, serving as a ledge or stop to limit the downward movement of the coupling pin proper, as will presently appear, so that the opening 14 is in its upper portion of the full diameter of the coupling pin and in its lower portion partly closed, as clearly shown in Fig. 2.



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