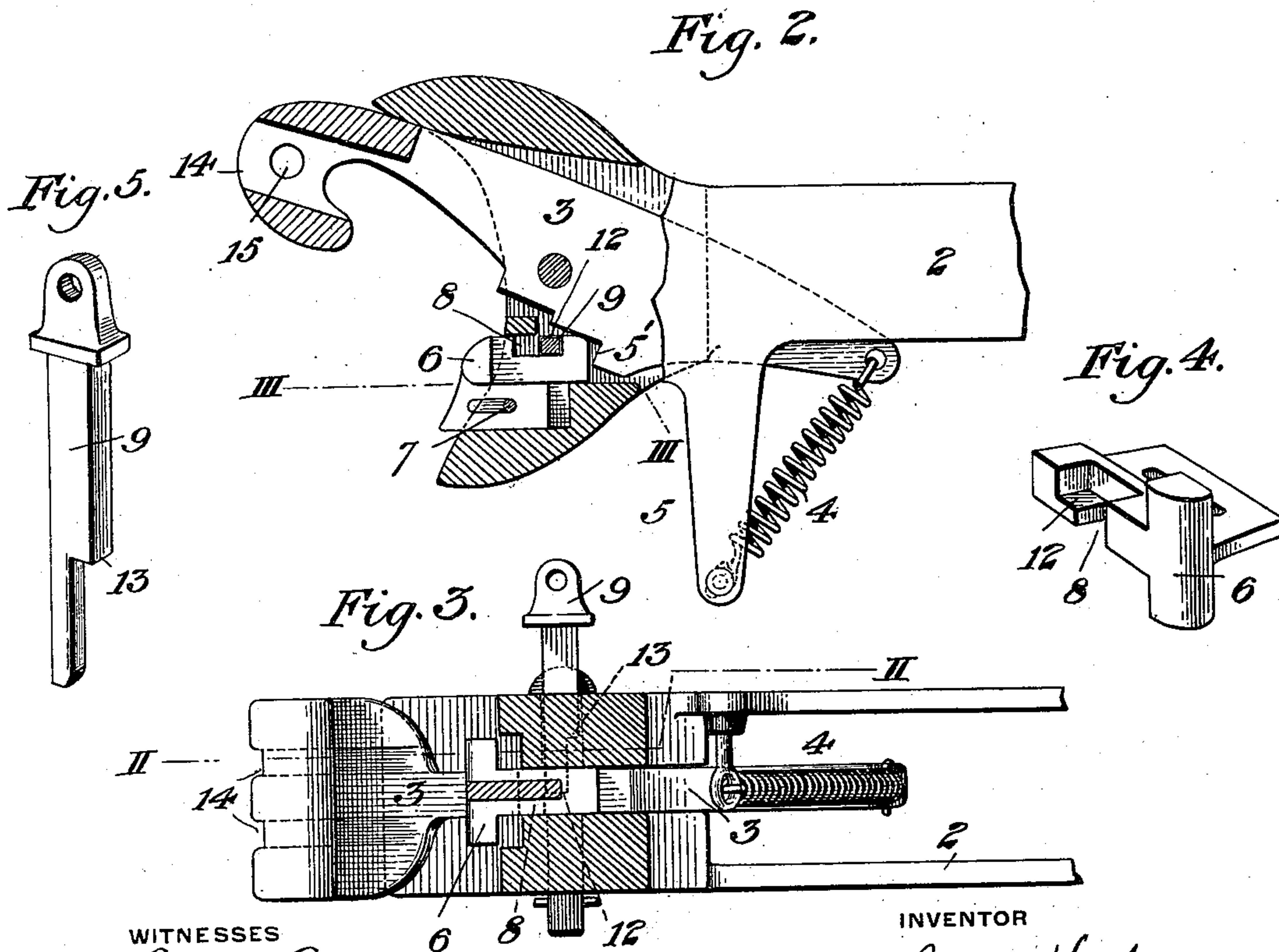
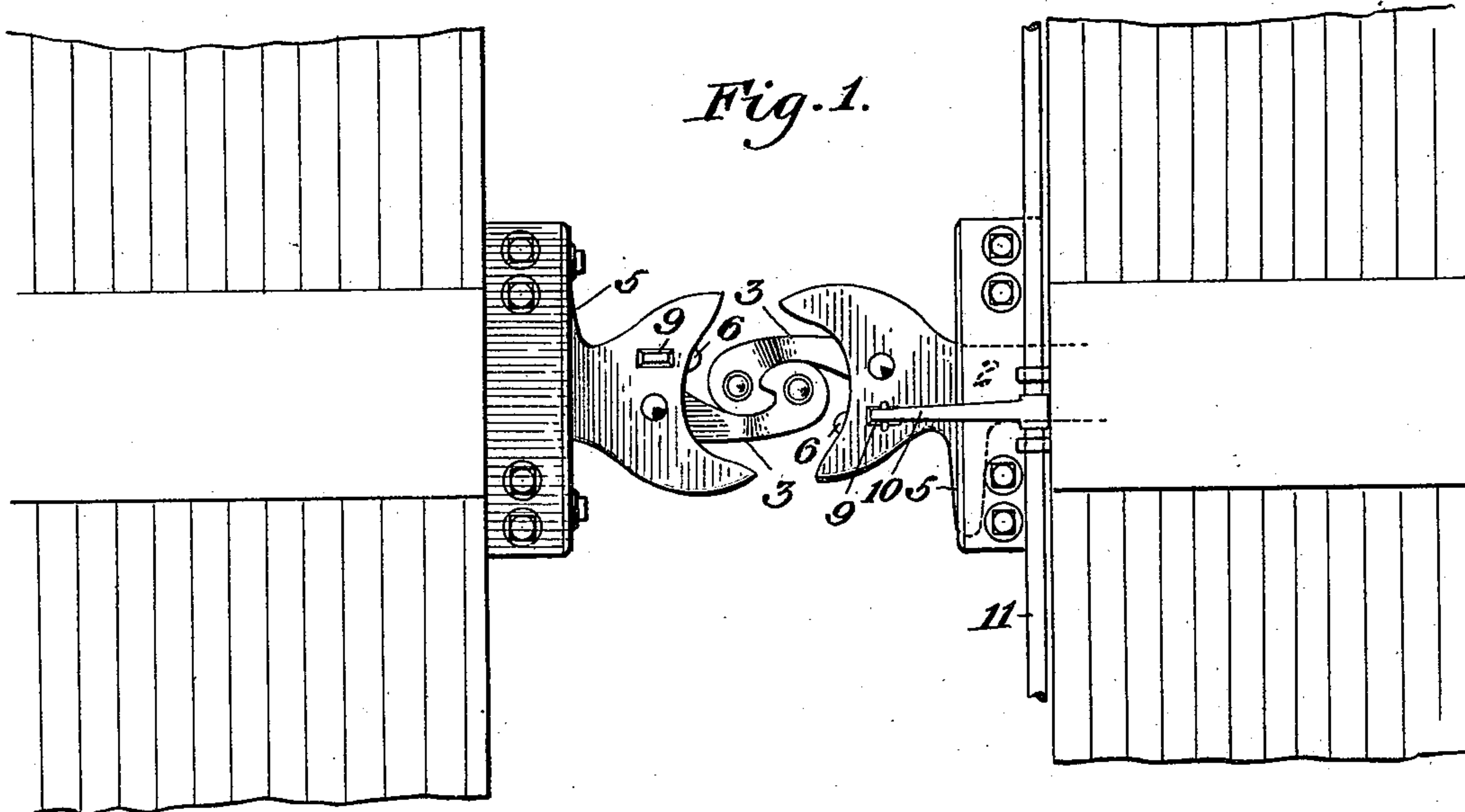


(No Model.)

J. HARPER.  
CAR COUPLING.

No. 557,383.

Patented Mar. 31, 1896.



WITNESSES

*A. M. Corwin*  
*G. J. Holdship*

INVENTOR

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*by Baker & Baker*  
*his attys.*

# UNITED STATES PATENT OFFICE.

JAMES HARPER, OF CANNONSBURG, PENNSYLVANIA.

## CAR-COUPLING.

SPECIFICATION forming part of Letters Patent No. 557,383, dated March 31, 1896.

Application filed October 11, 1895. Serial No. 565,377. (No model.)

*To all whom it may concern:*

Be it known that I, JAMES HARPER, of Cannonsburg, in the county of Washington and State of Pennsylvania, have invented a new and useful Improvement in Car-Couplers, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, forming part of this specification, in which—

Figure 1 is a top plan view of my improved coupling locked in position. Fig. 2 is a top plan view of one of the coupler-heads, partly broken away, on the line II II of Fig. 3. Fig. 3 is a vertical sectional view of the head on the line III III of Fig. 2. Fig. 4 is a detail perspective view of the sliding buffer-block, and Fig. 5 is a similar view of the locking-pin.

My invention relates to the Janney type of couplers, and is designed to afford a cheap, simple, and secure coupler of such character.

In the drawings, 2 represents the draw-head having a horizontal slot therein, within which is pivoted the lever 3, having a hooked front end arranged to engage and couple with a similar hook upon the other coupler-head. This lever is normally held in open or unlocked position by a spring 4, secured to a side projecting lug 5 upon the draw-head and connected to the rear end of the lever. Upon the side of the lever, in the rear of its pivotal point, is provided a shoulder or offset 5', with which engages a sliding buffer-block 6, which moves within a suitable slot in the coupler-head and is of the form shown in Fig. 4. This sliding block is held in position and limited in its movements by a pin 7 projecting through a vertical slot therein, and with a slot or notch 8 in the side of this block engages the vertically-movable locking-pin 9, which is lifted by the usual lever 10, secured to the rock-shaft 11 upon the end of the car. The locking-block is provided at the side of the slot 8 with a ledge or rest 12, upon which rests a shoulder 13 upon the locking-pin, thus limiting its downward movement as it moves into

locked position. The hooked ends of the levers are provided with a horizontal slot 14 of suitable size to receive the ordinary link, a hole 15 being provided for the pin employed therewith.

The operation of my improved coupler is apparent. The levers being in the open position shown in Fig. 2, as the cars come together the hooked end of the lever contacts with the sliding buffer-block in the opposite coupler-head, and as it drives this block rearwardly the locking-pin 9, whose lower end was resting upon the ledge 12, drops down into the slot 8 as the lever swings into position, thus coupling the hooked ends of the levers together and locking them in position. When the locking-pin is lifted, the spring at once throws the coupler open into unlocked position.

The advantages of my invention result from the small number of parts employed and the simplicity and strength of the combination.

A weight may be used in place of the spring, if desired, and many other changes may be made by the skilled mechanic without departing from my invention, since

What I claim is—

A coupler-head having a horizontal slot therein, a lever pivoted in the slot, and having a projecting hook at its front end, and a tailpiece, extending through the head, a spring attached to the tailpiece and arranged to hold the hook normally open, and a sliding buffer-block located in front of the tail portion and having its rear end arranged to engage an offset at one side of the tailpiece, and a vertical locking-pin arranged to engage with a slot in the sliding buffer-block; substantially as described.

In testimony whereof I have hereunto set my hand.

JAMES HARPER.

Witnesses:

RICHARD BLACK,  
DANIEL DAY.