

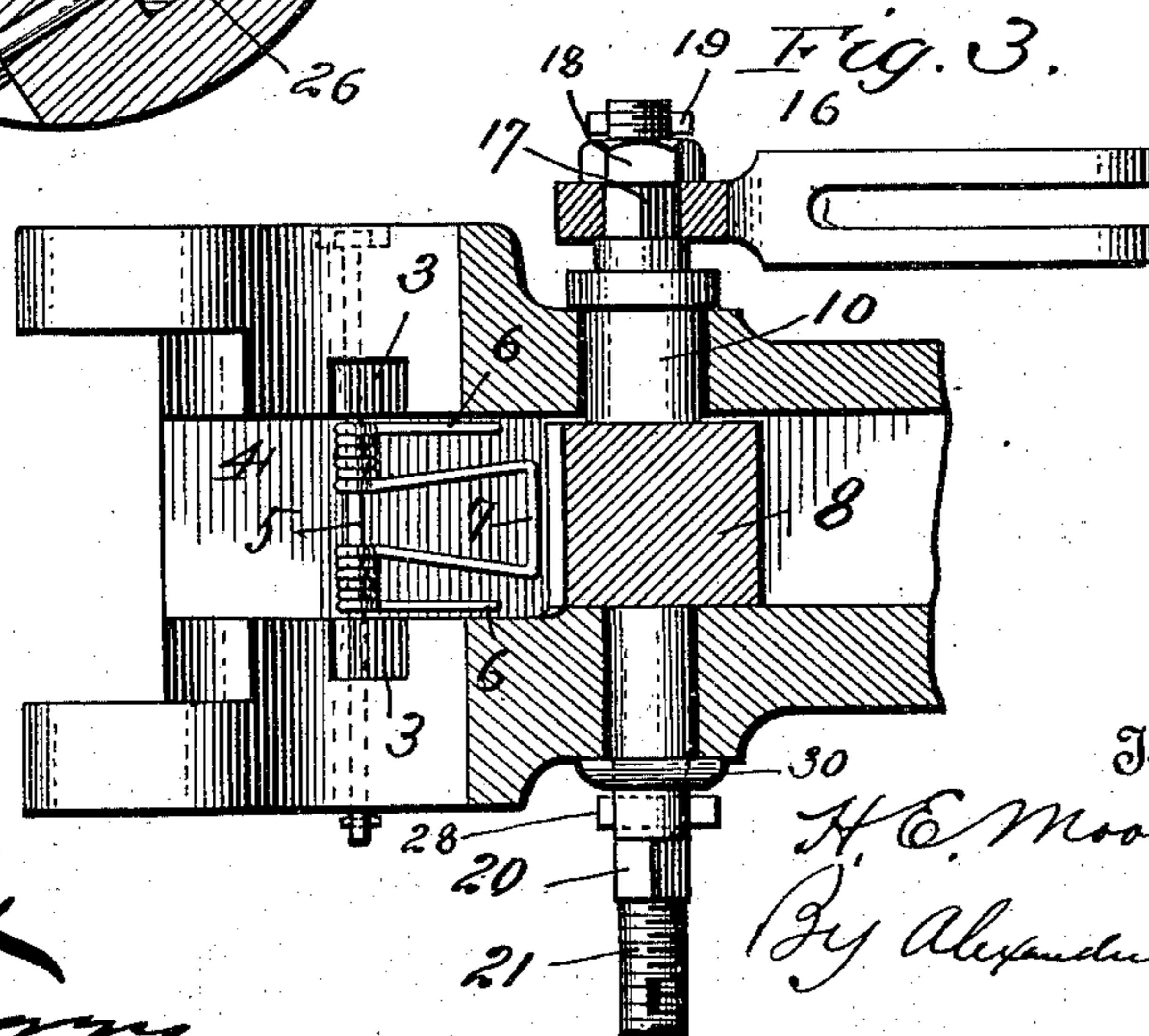
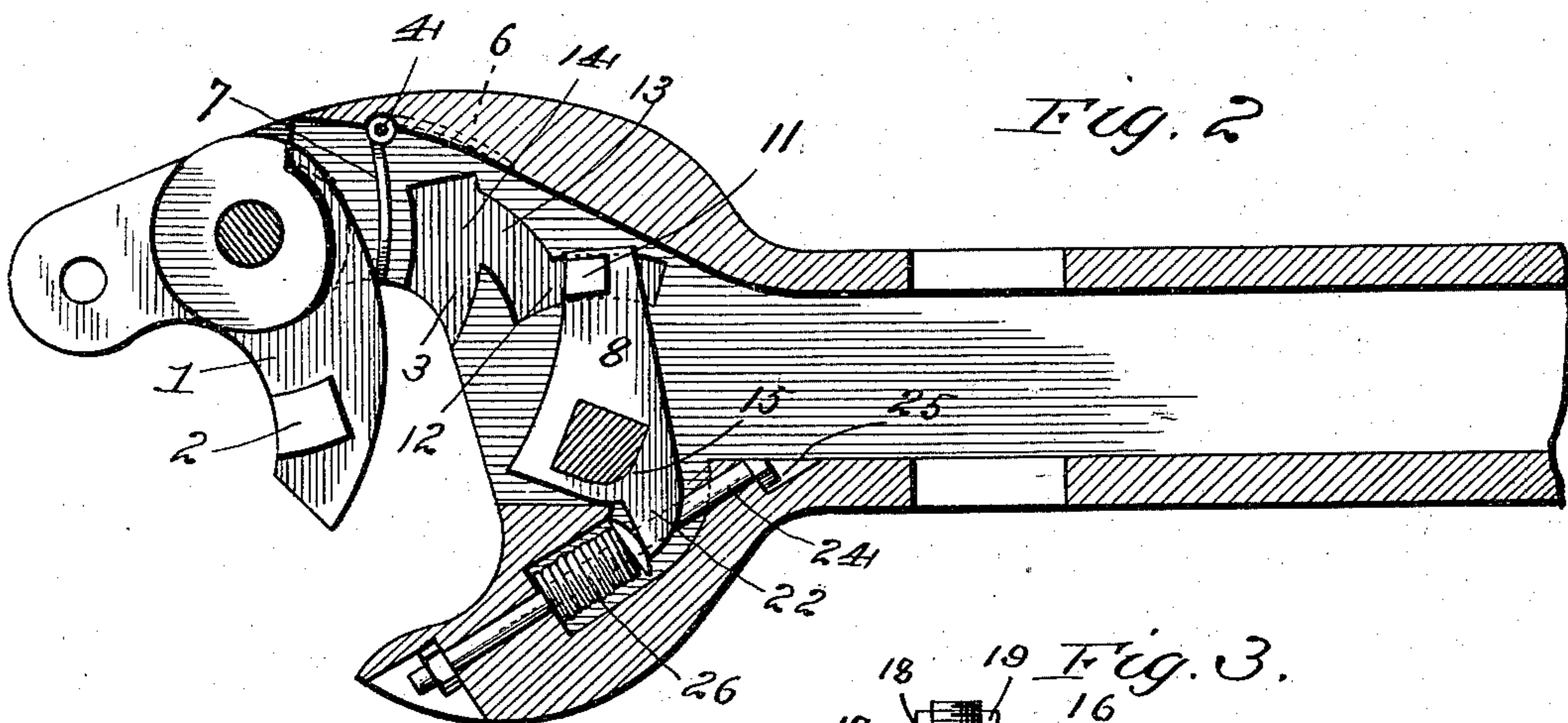
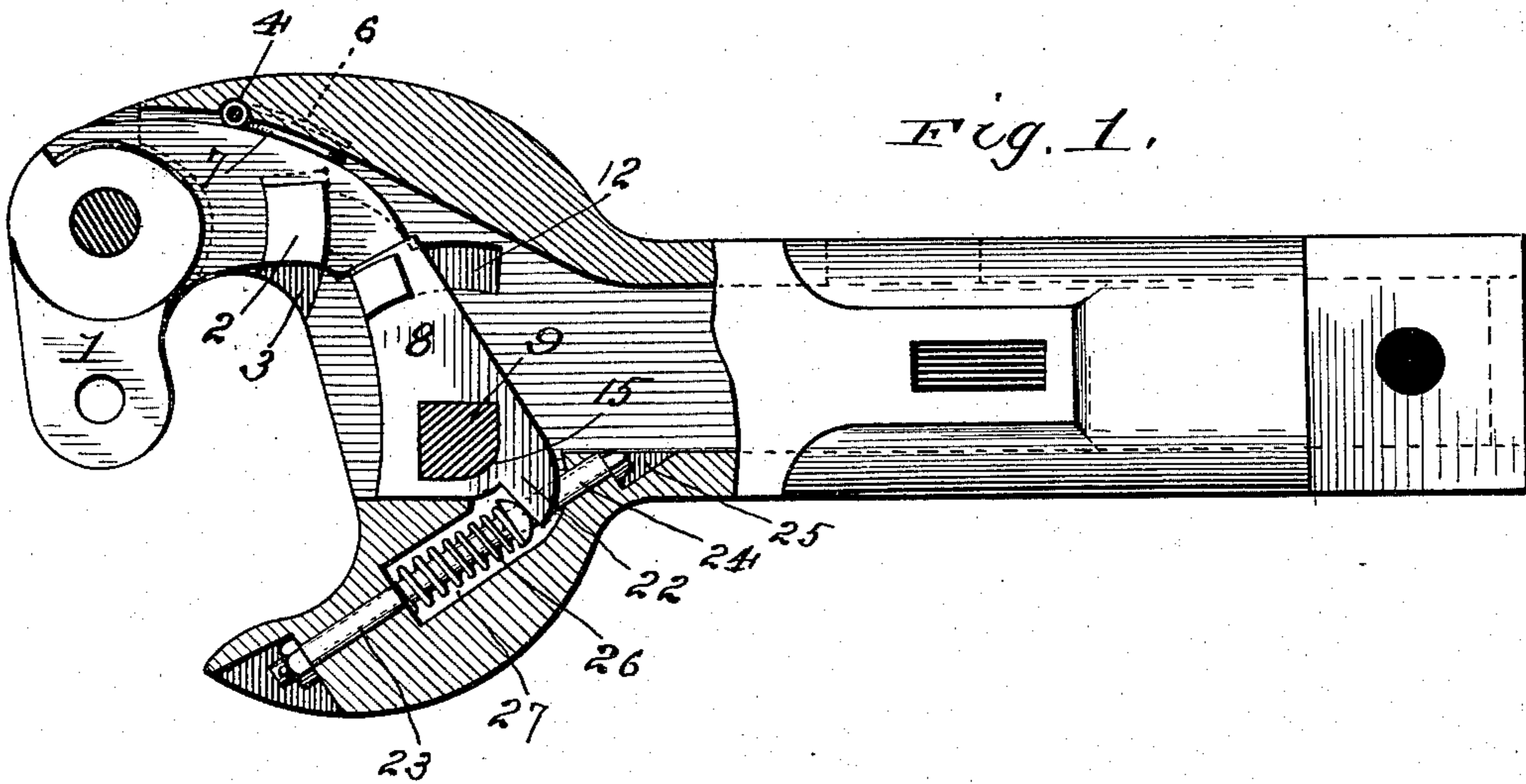
(No Model.)

2 Sheets—Sheet 1.

H. E. MOOMAW.
CAR COUPLING.

No. 547,494.

Patented Oct. 8, 1895.



Witnesses
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Chas. A. Murray

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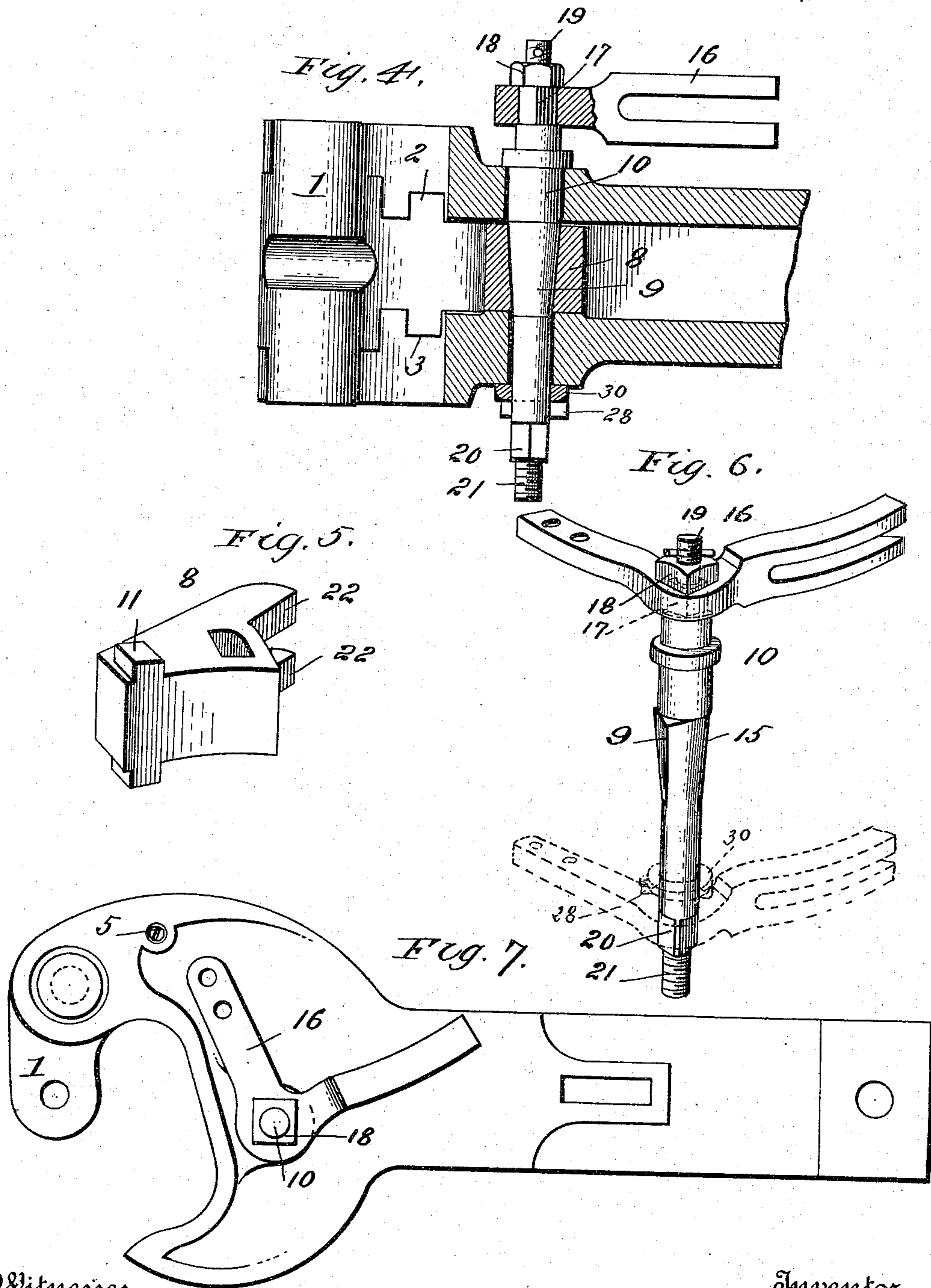
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CAR COUPLING.

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UNITED STATES PATENT OFFICE.

HENRY E. MOOMAW, OF SALEM, VIRGINIA.

CAR-COUPLING.

SPECIFICATION forming part of Letters Patent No. 547,494, dated October 8, 1895.

Application filed July 12, 1895. Serial No. 555,753. (No model.)

To all whom it may concern:

Be it known that I, HENRY E. MOOMAW, a citizen of the United States, residing at Salem, in the county of Roanoke and State of Virginia, have invented certain new and useful Improvements in Passenger-Car Couplings, of which the following is a specification, reference being had therein to the accompanying drawings.

In the drawings, Figure 1 is a view, partly in plan and partly in horizontal section, showing the coupling devices locked. Fig. 2 is a horizontal section showing the devices uncoupled. Fig. 3 is a vertical longitudinal section, the coupling-jaw being removed; Fig. 4, a similar view, the parts being in their locked positions; Fig. 5, a detail perspective of the locking-block; Fig. 6, a similar view of the pin adapted to carry the locking-block, and Fig. 7 a plan view.

This invention is designed to improve the construction shown in my former patent, No. 539,389, dated May 14, 1895; and it consists in certain novel features of construction herein-after fully described, and particularly pointed out in the claim appended.

Referring to the drawings by numerals, 1 designates the coupling-jaw, which is pivoted, as usual, in one side of the draw-head, and whose rear locking-arm is provided, as formerly, with the locking-lugs 2, which enter the grooves 3 in the upper and lower walls of the mouth of the draw-head. To automatically throw out the coupling-jaw to the position shown in Fig. 2 when it is released from the locking-block, I employ a torsional spring 4 and mount the same on a vertical pin 5, passing through a vertical recess in the draw-head, between the coupling-jaw and the inner wall of the draw-head, said spring being coiled around the pin and having its ends 6 extended rearward and bearing upon and resting in recesses in said inner wall of the draw-head, and also having a loop 7 formed in it about midway its length and extended forward to form an arm that will bear normally upon the rear side of the coupling-jaw and tend to throw the same outward, said loop being widened out to a substantially-triangular shape in order to give a broad flat bearing upon the coupling-jaw and thereby prevent undue friction and oscillation. This spring arrange-

ment for throwing open the jaw is advantageous in that it avoids the necessity of having the trainmen pass in between the cars for the purpose of pulling open the jaws.

The locking-block 8 is mounted, as usual, upon the tapered part 9 of the vertical pin 10, and extends from the inner end of the coupling-lever to the opposite wall of the draw-head and forms a positive abutment for the coupling-jaw while the same is coupled, the pin 10 being mounted in the draw-head sufficiently loosely to permit a slight bodily movement of the block, as formerly. As also shown in the former patent, the free end of the locking-block is provided with the lugs 11, which work in curved grooves 12 in the mouth of the draw-head, the forward end of said grooves communicating by passages 13 and 14 with the inner end of the grooves 12 to permit the locking-block to be inserted and removed. As will be observed, the corner 15 of the tapering part 9 of the pin is rounded off to avoid the formation of a sharp corner in the adjacent part of the locking-block, thereby strengthening the block at that point. Secured upon the upper end of the pin 10 is the angle-lever 16, one end of which is adapted to be connected to the operating mechanism carried by the car, and the other end of which is adapted to be connected by a slack safety-chain to a stationary part of the car-frame, the object of the safety-chain being to automatically uncouple the cars should the devices fastening the draw-bar to the car break loose, whereby the draw-head will be prevented from becoming entirely detached from the car and falling upon the road-bed. The angle-lever fits over a squared portion 17 on the upper part of the pin and is held thereon by means of a nut 18 and lock-pin 19. The lower part of the pin 10 is also provided with a squared portion 20 and a threaded portion 21 similar in size and shape to the corresponding parts on the upper end of the pin, whereby the angle-lever may be removed from the upper end of the pin and placed upon the lower end thereof whenever it is desired to operate the coupling devices from beneath the draft-timbers of the car. The pin 10 is secured in the draw-head by washer 30 and removable split pin 28.

The locking-block is provided with the lugs 22, between which the stationary diagonal

bolt 23 works, this bolt in the present construction extending from the forward end of the draw-head diagonally inward and passing through an opening 24 in the front corner of the wall of the draw-bar, its head resting in a recess 25 in the inner side of said wall. The actuating coil-spring 26 is inclosed in a socket 27, formed in the inner wall of the draw-head, whereby it will be protected from injury.

10 The advantage in mounting the diagonal bolt in the manner shown is that the wall extending across the hollow of the draw-bar may be entirely removed, leaving said hollow or passage entirely open at its forward end to permit the insertion of the tail-bolt usually employed for securing the draw-bars to the cars.

Having thus fully described my invention, what I claim is—

10 In a car coupling, the combination of a drawhead, a coupling jaw pivoted therein, a

locking block in the mouth of the drawhead, a vertical pin passing down through the draw-head and the locking block and having its projecting ends provided with corresponding squared portions 17, 20 and corresponding threaded parts at their extremities, an angle-lever fitted over one of said squared portions and adapted to be changed to the corresponding squared portion on the opposite end of the pin, a nut 18 screwed on the threaded portion at one end and adapted to be changed to the other end of the pin with the angle lever, a washer 30 on the pin below the drawhead, and a removable pin 28 below the washer, as and for the purposes set forth.

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

HENRY E. MOOMAW.

Witnesses:

JAMES WYLIE,
R. L. CAMPBELL.