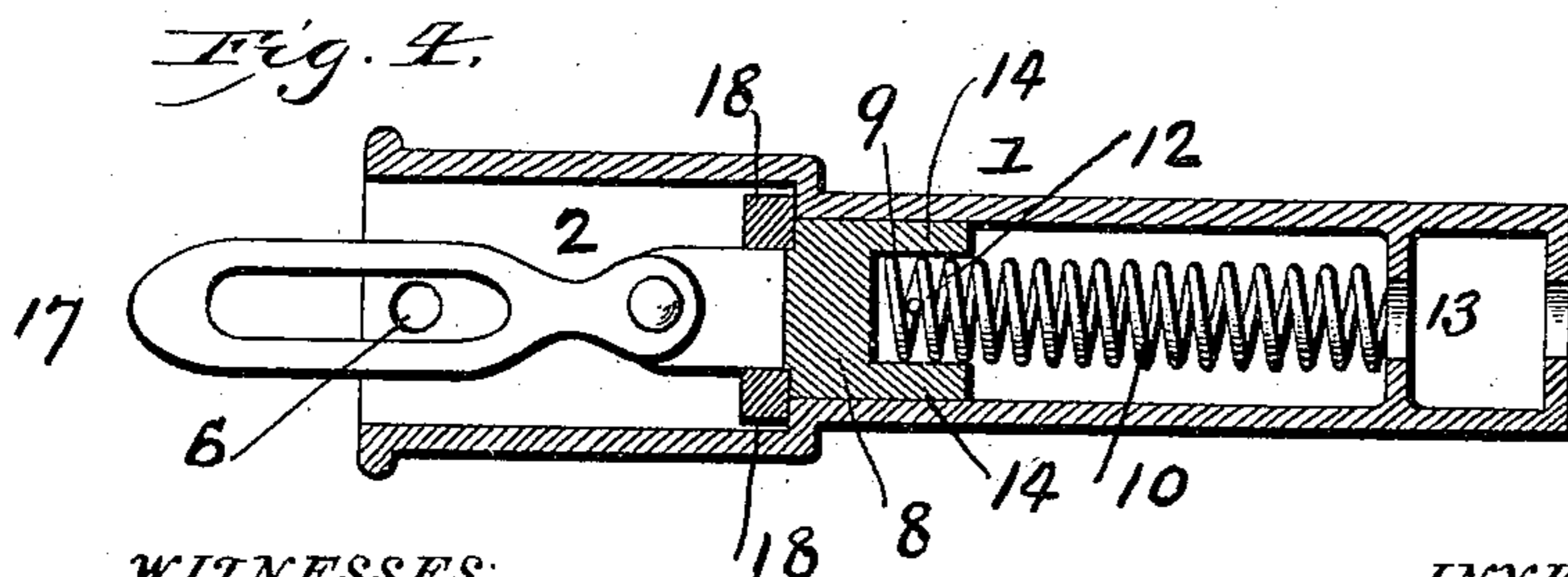
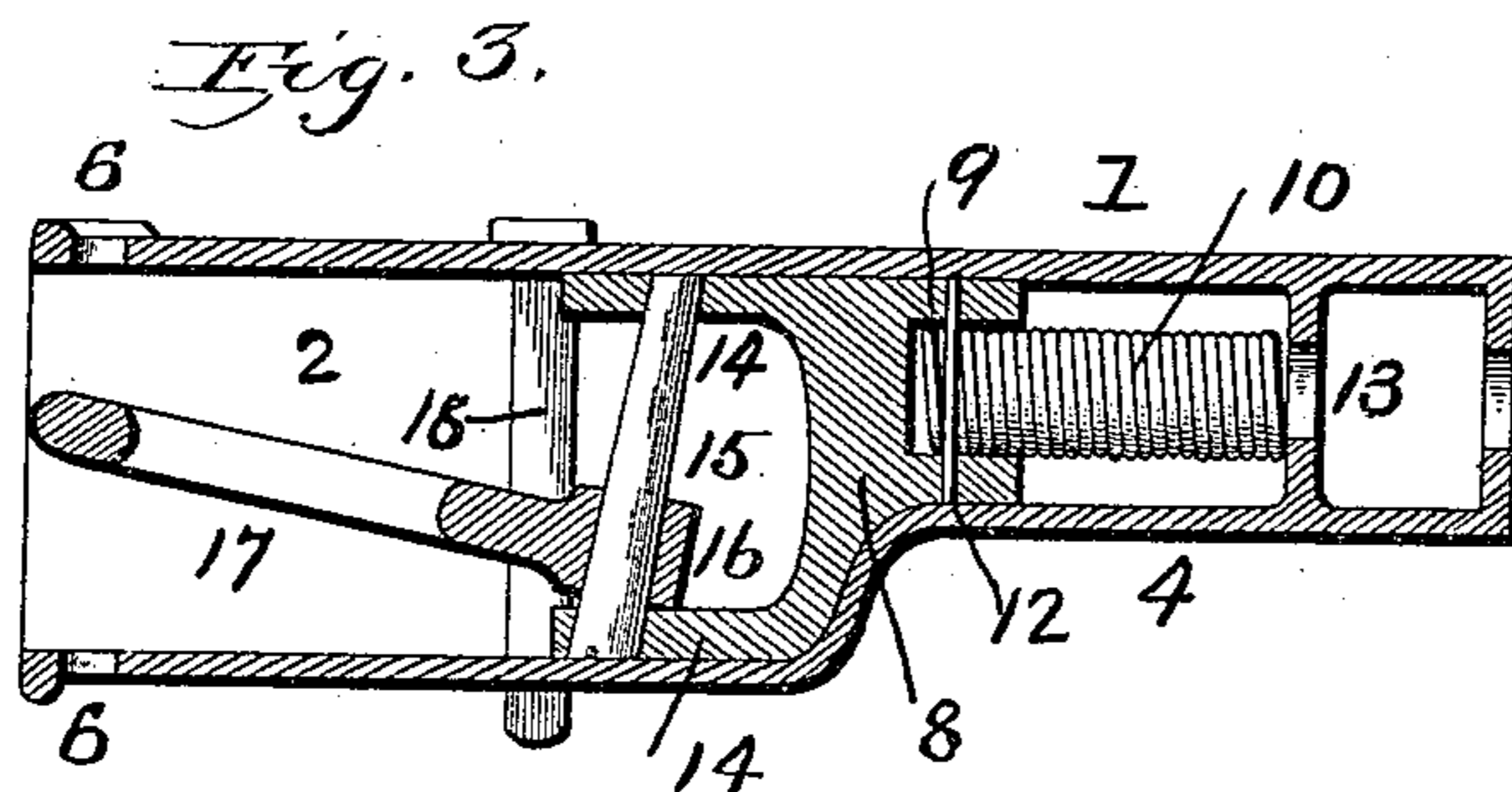
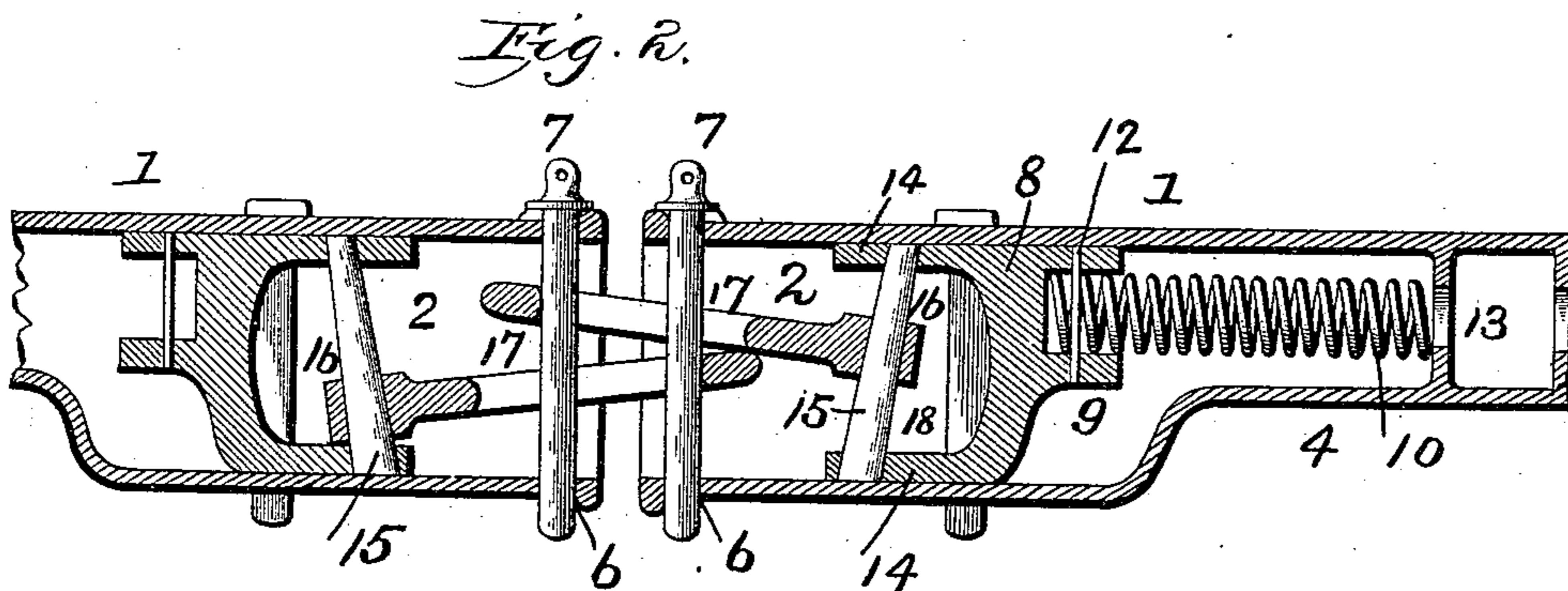
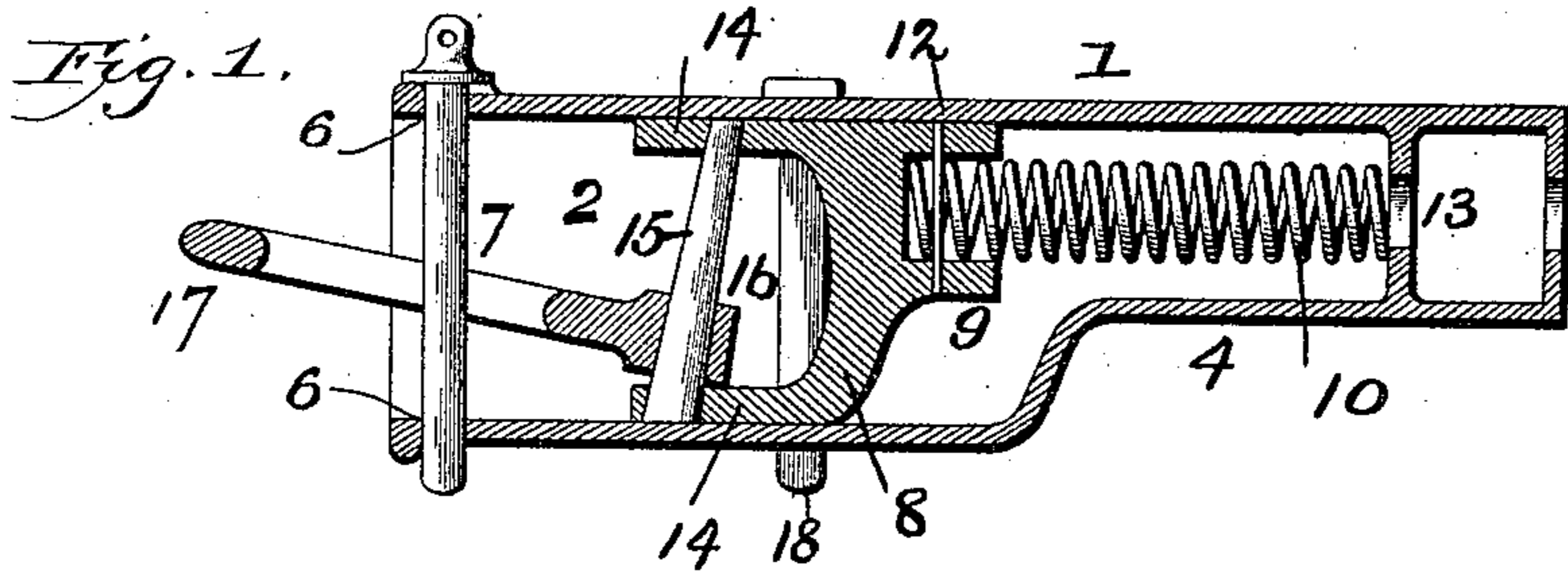


(No Model.)

J. W. MCGILL.  
CAR COUPLING.

No. 463,687.

Patented Nov. 24, 1891.



WITNESSES:  
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# UNITED STATES PATENT OFFICE.

JAMES WILSON MCGILL, OF PEORIA, ILLINOIS.

## CAR-COUPLING.

SPECIFICATION forming part of Letters Patent No. 463,687, dated November 24, 1891.

Application filed March 11, 1891. Serial No. 384,593. (No model.)

*To all whom it may concern:*

Be it known that I, JAMES WILSON MCGILL, a citizen of the United States, and a resident of Peoria, in the county of Peoria and State of Illinois, have invented certain new and useful Improvements in Car-Couplings; and I do hereby declare that the following is a full, clear, and exact description of the invention, which will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, which form a part of this specification.

My invention relates to improvements in car-couplings.

The object of the invention is to provide a car-coupling in which the links will be automatically held in proper position to enter the draw bar or head of an approaching car, thus avoiding the necessity of a brakeman or other party going between the cars in order to manipulate the links.

It is also the object to provide an improved construction whereby the coupling-links will automatically accommodate themselves to draw-heads of different heights.

The invention consists in the novel construction and combination of parts hereinafter fully described, and specifically pointed out in the claims.

In the accompanying drawings, Figure 1 is a sectional view of a car-coupling constructed in accordance with my invention. Fig. 2 is a similar view showing the couplings connected together. Fig. 3 is a similar view showing the coupling-link and connections housed within the draw-bar. Fig. 4 is a horizontal section taken on the line  $xx$ , Fig. 1.

In the said drawings the reference-numeral 1 designates a draw-bar having the enlarged portion 2 and the rearwardly-extending contracted portion 4. This draw-bar has the usual flaring mouth 5 and aligned apertures 6 for the coupling-pin 7.

The numeral 8 designates a follower located and movable within the draw-bar, having a short rearwardly-projecting tubular arm 9, within which is inserted one end of a coiled spring 10, which is held therein by means of pins 12, passing through said arms at right angles to each other. The opposite

end of the spring 10 abuts against stops 13, provided in the interior of the portion 4 of the draw-bar. Projecting from the front of the follower at top and bottom are two arms 14, to which is secured a tapering pin 15, which is slightly inclined from the perpendicular, as shown. This pin passes through a tapered hole in a boss 16, formed on the inner end of the coupling-link 17, the said link otherwise being of any ordinary construction. This boss is free to move up and down upon said pin, so as to accommodate the link to different heights of draw-bars. The object of inclining the pin 15 is so that the outer end or the point of the link will always be slightly elevated, preventing sagging or drooping of the same and insuring that it will be properly presented to an approaching draw-bar.

Located in the enlarged portion of the draw-bar, immediately in front of its junction with the contracted portion 4 and upon each side of the arms 14, are two square or other angularly-shaped vertical bars 18, which pass through aligned holes in the top and bottom of the draw-bar. These bars serve as stops to limit the outward movement of the follower, and by removing them the follower, spring, and coupling-link may be withdrawn from the draw-bar.

The operation will be readily understood. As the cars approach each other the coupling-links will enter the mouths of the draw-bars, enabling the coupling-pins to be inserted. In passing each other one of the coupling-links will be raised or elevated on the pin 15, while the other will be lowered. This feature will be found very efficient in coupling cars of different heights.

From the above it will be noted that the links are always in proper position to enter the draw-heads.

In case a coupling constructed as described should come in contact with a coupling of ordinary construction the link will be forced back into the draw-bar, as seen in Fig. 3, and thus be prevented from being injured or damaged.

Having thus described my invention, what I claim is—

1. In a car-coupling, the combination, with

the draw-bar, the spring-actuated follower, and the pin secured thereto, of the link having a boss with a tapering hole through which said pin passes, and a coupling-pin, substantially as described.

5 2. In a car-coupling, the combination, with the draw-bar, the spring-actuated follower, and the inclined tapering pin secured to the follower having a tapering aperture, of the  
10 coupling-link having a boss with a tapering aperture, and the coupling-pin, substantially as described:

3. In a car-coupling, the combination, with the draw-bar, of the follower having a rear-  
15 wardly-extending tubular arm and forwardly-projecting arms having apertures therein, the inclined tapering pin passing through said apertures, the coiled spring and the pins passing through said tubular arms at right  
20 angles to each other, the coupling-link hav-

ing a boss with a tapering aperture, and a coupling-pin, substantially as described.

4. In a car-coupling, the combination, with a draw-bar provided with an enlarged portion and a contracted portion and having aligned  
25 holes in its top and bottom, of the spring-actuated follower having an inclined pin, the coupling-link having an apertured boss through which said pin passes, and the vertical angular bars passing through said aper-  
30 tures in the draw-bar and serving as stops to limit the forward movement of the follower, substantially as described.

In testimony that I claim the foregoing as my own I have hereunto affixed my signature  
35 in presence of two witnesses.

JAMES WILSON MCGILL.

Witnesses:

WM. SCOTT,

EDWARD M. SEERL.