

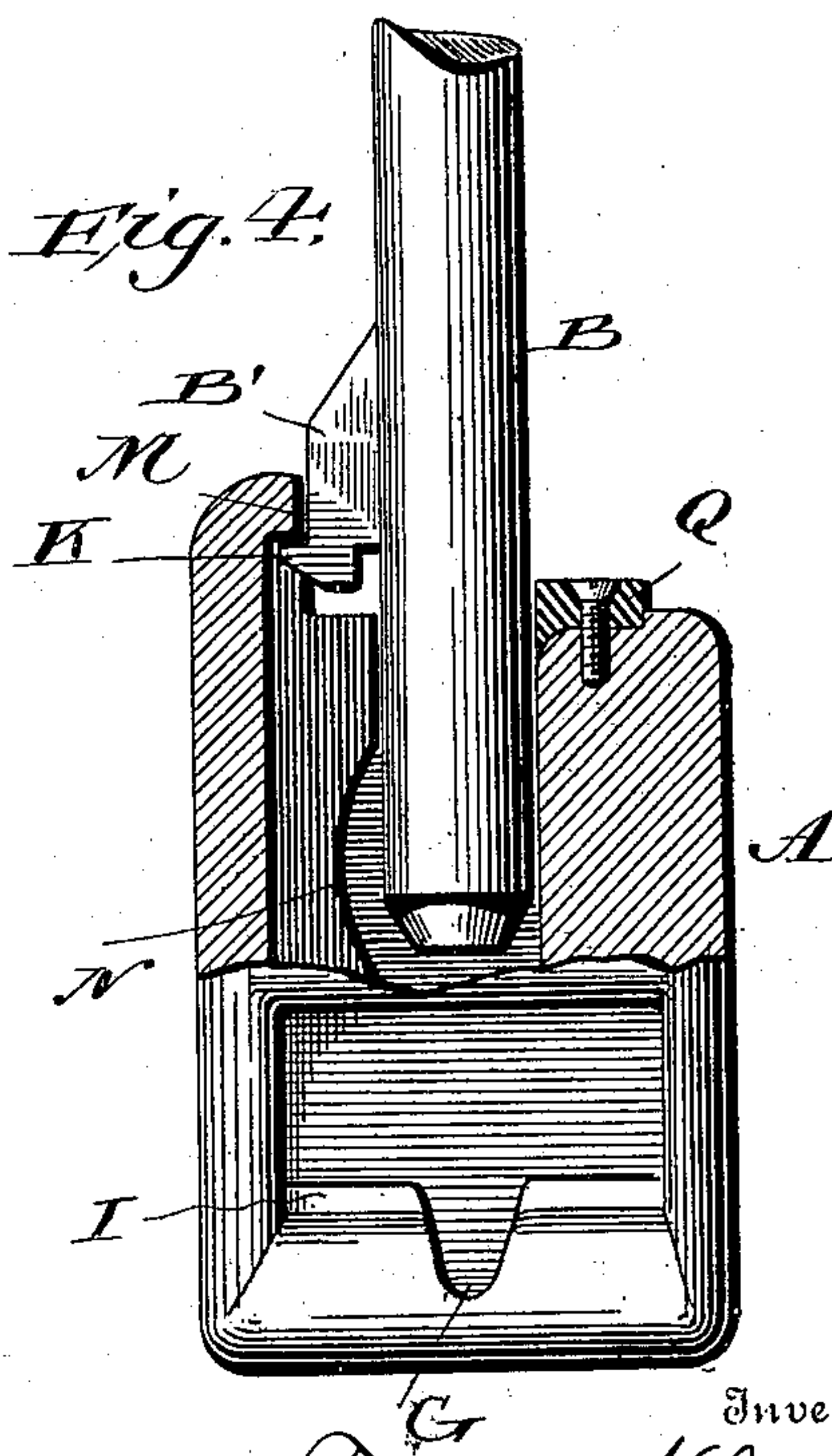
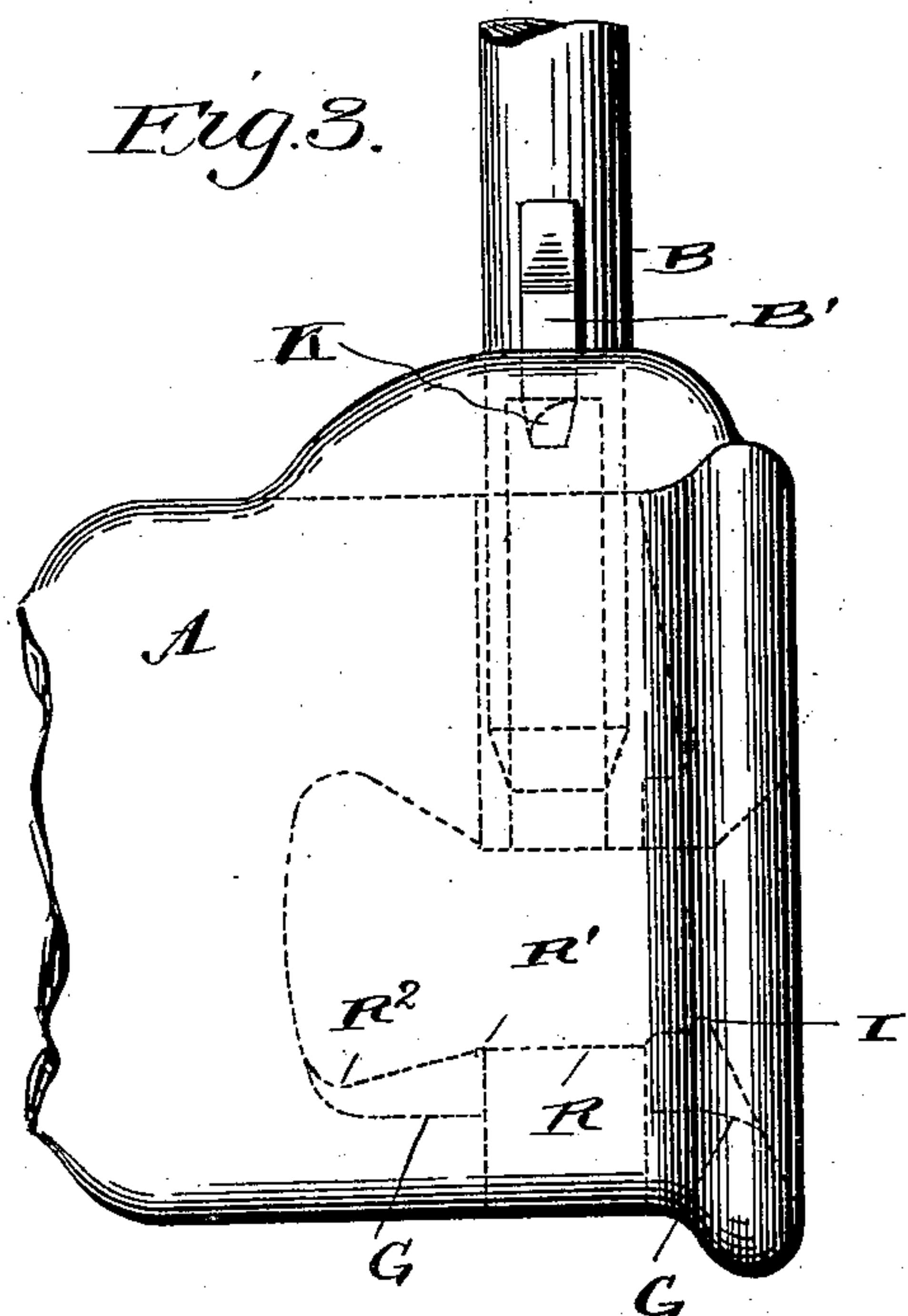
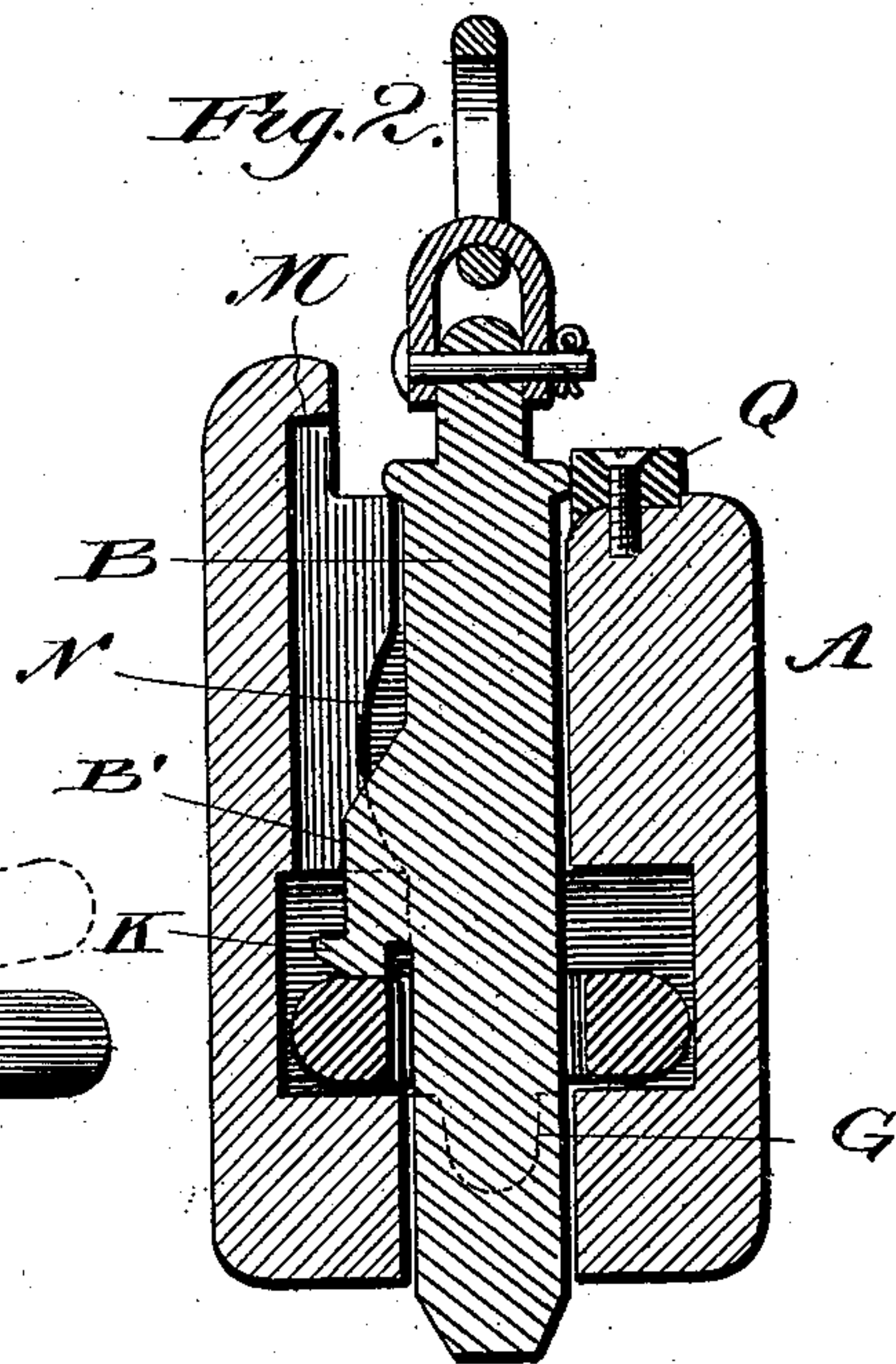
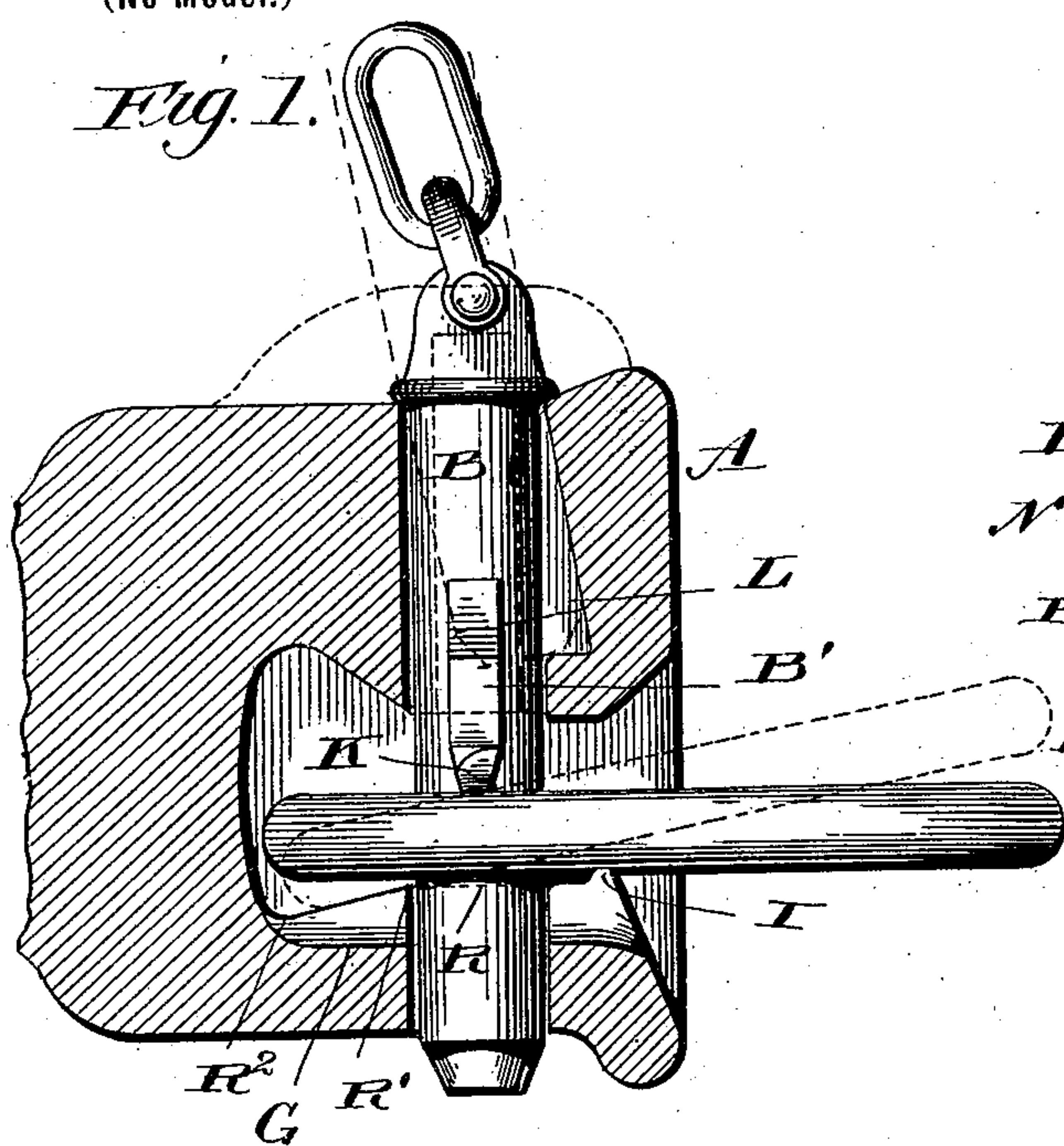
**No. 619,032.**

**Patented Feb. 7, 1899.**

**T. WHALEY.**  
**CAR COUPLING.**

(Application filed May 25, 1898.)

(No Model.)



Witnesses

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# UNITED STATES PATENT OFFICE.

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## CAR-COUPLING.

SPECIFICATION forming part of Letters Patent No. 619,032, dated February 7, 1899.

Application filed May 25, 1898. Serial No. 681,707. (No model.)

*To all whom it may concern:*

Be it known that I, THOMAS WHALEY, a citizen of the United States, residing at Florence, in the county of Fremont and State of Colorado, have invented certain new and useful Improvements in Car-Couplers; and I do 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, reference being had to the accompanying drawings, and to the letters of reference marked thereon, which form a part of this specification.

This invention relates to improvements in car-couplers, and especially to a coupling of the gravity support-pin type, in which provision is made for preventing the pin from becoming uncoupled from the link from any jar, as when draw-heads on cars come together with considerable force and when the draw-heads are of different heights.

More specifically the present invention resides in the provision of a gravity pin-coupler in which the pin is provided with a laterally-extending lug which is designed to strike against a projection on the draw-head adjacent to the pin-hole therein and prevent the pin from being thrown out of the draw-head from any sudden jar, the said pin then to be slightly tilted, so that as it drops back in place its lower end will avoid catching in the recessed wall of the pin-hole. In connection with the pin and draw-head means is provided to allow the pin to be readily removed from the draw-head when it is desired to uncouple the cars.

Another feature of the present invention consists in attaching to the draw-head a member adjacent to the pin-hole, whereby the pin may be securely held locked to a link in the draw-head.

To these ends and to such others as the invention may pertain the same consists, further, in the novel construction, arrangement, and adaptation of parts, as will be hereinafter more fully described and then specifically defined in the appended claim.

My invention is clearly illustrated in the accompanying drawings, which, with the letters of reference marked thereon, form a part of this application, and in which drawings

similar letters of reference indicate like parts throughout the several views, in which—

Figure 1 is a central vertical sectional view through a draw-head, coupling-pin, and link. 55  
Fig. 2 is a detail view of the coupling-pin.  
Fig. 3 is a side elevation of my car-coupler, showing in dotted lines the pin raised so that the lug on the pin strikes against the shoulder in the draw-head. Fig. 4 is a sectional 60  
view through a part of the draw-head, taken on a line at right angles to the view shown in Fig. 3.

Reference now being had to the details of the drawings by letter, A designates the draw-head, which is vertically apertured to receive the coupling-pin. The end of the draw-head is recessed out for the reception of the coupling-pin, and the rear or inner end of the recess in the draw-head is wider than at the entrance, which provision is made so as to allow draw-heads of different heights to be readily coupled. At the entrance of the recess is an upwardly-extending lip I, on which the link rests when the same is held in the draw-head. 75  
The pin B has a lateral extension B', which is provided to hold the link in a substantially horizontal position when it is to be coupled. The front wall of the pin-hole is recessed out, as shown at L, to receive the lower free end 80  
of the coupling-pin when held in readiness to be jarred from its support when two draw-heads come together forcibly and fall by gravity through the link held under the pin.

In order to prevent the pin from jumping 85  
out of the draw-head, which might be occasioned by a jar imparted to the pin, I provide a lug K on the side of the extension B', which in case the pin for any reason is thrown up in the draw-head, so that an uncoupling would 90  
be endangered, the said lug will strike against the shoulder M, which overhangs the pin-aperture, as clearly illustrated in the drawings. The upper surface of the said lug K, it will be noted, is oval shape, the highest portion being 95  
to one side of the middle of the pin, and this highest side is adapted to be nearest the recess L in the pin-hole and is provided to throw the lower end of the coupling-pin away from said recess when the pin or lug carried 100  
thereby strikes against the shoulder M, and when the pin falls back at once by gravity



to its coupling position its lower end will clear the shoulder formed by the recessing of the pin-aperture, thus preventing an uncoupling, which could not be prevented should the pin happen to catch in the recess L.

When it is desired to remove the pin from the draw-head, it may be easily accomplished by tilting the pin so that the lug will clear the shoulder, the wall of the pin-aperture being recessed out, as at N, to allow the end of the pin to swing therein. The pin is so constructed as to be somewhat top-heavy, and as the chain secured thereto naturally hangs so as to draw the head of the pin back when latter is raised the lower end of the pin will readily fall into the recess L and be held there until it is desired to effect a coupling.

If it is desired to lock the pin in the draw-head, I have provided means for so doing, which consists in securing a guard Q to the draw-head adjacent to the pin-hole, which will not allow the pin to be tilted sufficiently to admit the lug to clear the shoulder M. This guard may be secured in place by a screw, as shown, and may be readily removed and dispensed with altogether, if desired.

The lower wall of the chambered or recessed portion of the draw-head has a flat portion, as seen at R, and inclines downward and backward from the point R' to R<sup>2</sup>, thus forming a bearing at R', on which the link may rest when two draw-heads of different heights are coupled together. In such a relation the link would assume the position shown in dotted lines in the drawings, with the upper side of the link bearing against the extension B' on the pin.

In order to drain off any water that may accumulate in the recessed end of the draw-head, I have channeled the bottom thereof, as shown at G, making the lowest part of the channel as low as the lowest part of the recess in the draw-head.

I am aware that it is common in the art to construct car-couplers in which the pin has an extension provided to hold the link in a horizontal position; also, to recess the pin-hole, in which recess the end of the pin is adapted to be held and to be thrown out by a sudden jar as the draw-heads come together forcibly, and hence I do not claim such constructions broadly.

Having thus described my invention, what I claim to be new, and desire to secure by Letters Patent, is—

In a car-coupler, the combination with the draw-head having recesses L and N therein, the gravity-pin having a lateral extension B', the lug K at the lower end thereof, the said lug adapted to rest upon a link when in a coupling relation, said lug having its upper surface oval-shaped, with its highest point at the edge of the projection, a shouldered portion on the draw-head against which the said oval surface is designed to strike, of the guard Q secured to the draw-head opposite the shouldered portion, as shown and for the purpose set forth.

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

THOMAS WHALEY.

Witnesses:

HARRY S. FITZGERRELL,  
ANNIE L. B. WHITE.