

(No Model.)

J. R. ROWELL.
CAR COUPLING.

No. 542,944.

Patented July 16, 1895.

Fig. 1.

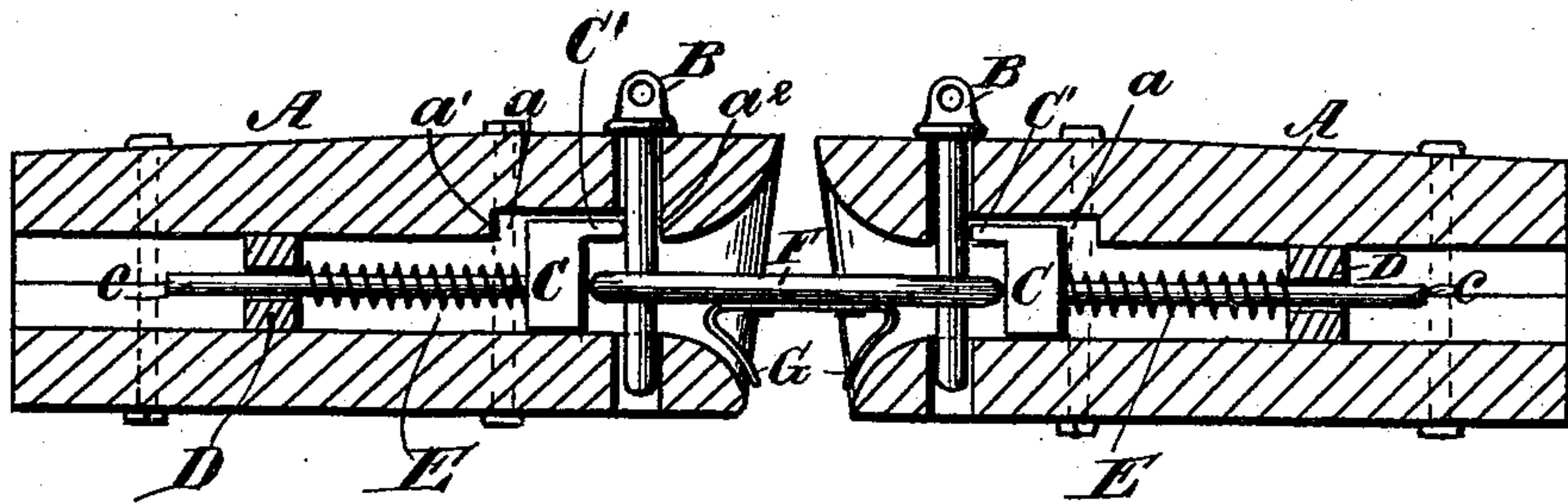


Fig. 2.

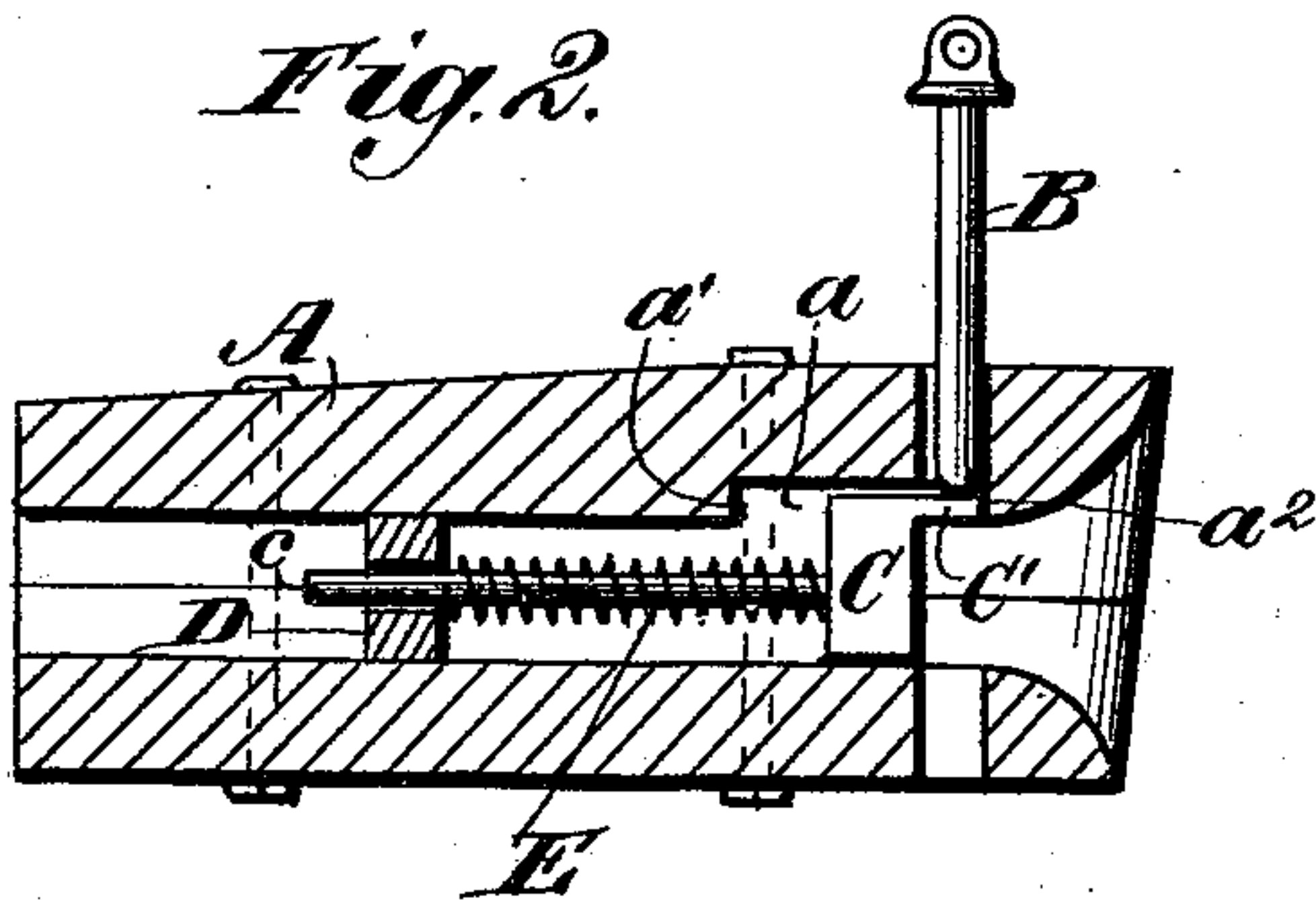
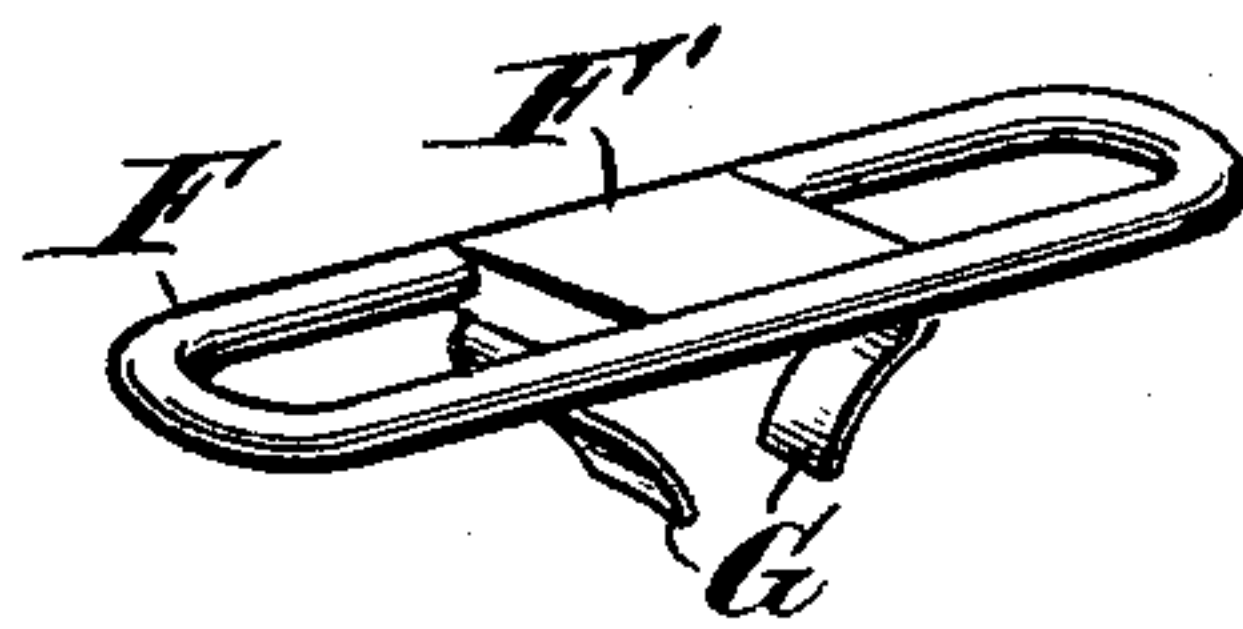


Fig. 3.



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JOHN R. ROWELL, OF EMORY, TEXAS.

CAR-COUPLING.

SPECIFICATION forming part of Letters Patent No. 512,944, dated July 16, 1895.

Application filed April 20, 1894. Serial No. 508,360½. (No model.)

To all whom it may concern:

Be it known that I, JOHN R. ROWELL, a citizen of the United States, residing at Emory, in the county of Rains and State of Texas, have invented a new and useful Automatic Car-Coupler, of which the following is a specification.

My invention relates to an improved car-coupling and has for its object to provide in an automatic car-coupling improved means for holding and guiding the link into the draw-head; and to this end my invention consists in the novel features hereinafter fully described, and definitely pointed out in the claims following the description.

In the accompanying drawings, forming a part of this specification, Figure 1 is a longitudinal central section of my improved coupling, showing the parts as coupled together. Fig. 2 is a similar view of one of the draw-heads, showing the parts in position to receive the link to effect the coupling; and Fig. 3 is a perspective view of the link.

Referring to the drawings, the letter A indicates the draw-head, recessed upon its upper interior wall, as at a , thus forming two shoulders, as at a' a^2 . Within the draw-head A is arranged a pin-support C, consisting of a block, preferably formed of metal, provided at its upper forward portion with a laterally-projecting flange C' , said flange and upper portion of the block resting within the recess a , which is made sufficiently long to permit of a limited movement of the block between the shoulders a' a^2 , for the purpose hereinafter made apparent. Projecting rearwardly from the block C is a guide-rod c , that at its rear end passes through a perforation formed in a head D, rigidly secured in the draw-head, and about said guide-rod is coiled a spring E that at one end is secured to the block C and at its other end is secured to the head D.

B indicates the coupling-pin passing through suitable perforations formed in the upper and lower walls of the draw-head, as usual. Normally the spring E exerts an expansive force to throw the pin-supporting block outwardly or toward the front end of the draw-head, the shoulder a^2 acting as a stop against which the flange C' abuts and thus limits the outward movement of said block. When the block is thus thrown out-

ward and the device is in position for coupling, the coupling-pin rests on the flange C' of the pin-supporting block C, as shown in Fig. 2, and as the other draw-head is caused to approach the link strikes the block C and drives it back into the draw-head, thus forcing the flange C' from beneath the pin B, upon which the pin will drop by gravity through the link and into the perforation formed in the under side of the draw-head, thus completing the coupling. The shoulder a' forms a stop for limiting the inward movement of the block C and prevents the undue compression of the spring E, while the shoulder a^2 limits the outward movement of the block, as before described, and prevents the accidental and complete withdrawal of the block from the draw-head.

In order that the pin-support C may be inserted within the draw-head I form the latter in two halves or sections, an upper and lower one, which, after the pin-support has been placed in position between them, are bolted together. This manner of forming the draw-head is well known and, therefore, requires no detailed description.

In order that the link may be supported in a horizontal position and be properly guided into the draw-head without the intervention of human aid the same is constructed as follows: Midway between its ends the link F is provided with a bridge-piece F' , to which are secured the guide-springs G G, each consisting of a flat steel spring secured at one end to said bridge-piece F' and thence curved downwardly and rearwardly in such manner that when one end of the link is inserted in the draw-head and the coupling-pin passed therethrough the guide-spring adjacent to the coupled end of the link will bear upon the lower forward portion of the draw-head and support the link in the proper position to enter the approaching draw-head. By making the guides G of spring metal the link will be yieldingly supported and the liability of the guides being broken by the shock caused by the impact of the link against the block C will be obviated.

Having described my invention, what I claim is—

1. In a car coupling, the combination of the drawhead A, the sliding pin support block C

provided at its upper forward edge with a
laterally projecting flange C', said block and
flange resting within a suitable recess formed
in the upper interior wall of the drawhead
5 and having a longitudinal movement therein,
the rod c carried by said block and passing
through a perforated head D fixed in the
drawhead, a coiled spring arranged around
said rod between said block and head, the
10 coupling pin B, and the link F provided with
downwardly and inwardly projecting spring

guides G, substantially as shown and de-
scribed.

2. A car coupling link provided with the
spring guides G projecting downwardly and 15
inwardly in opposite directions, substantially
as described and for the purpose specified.

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