

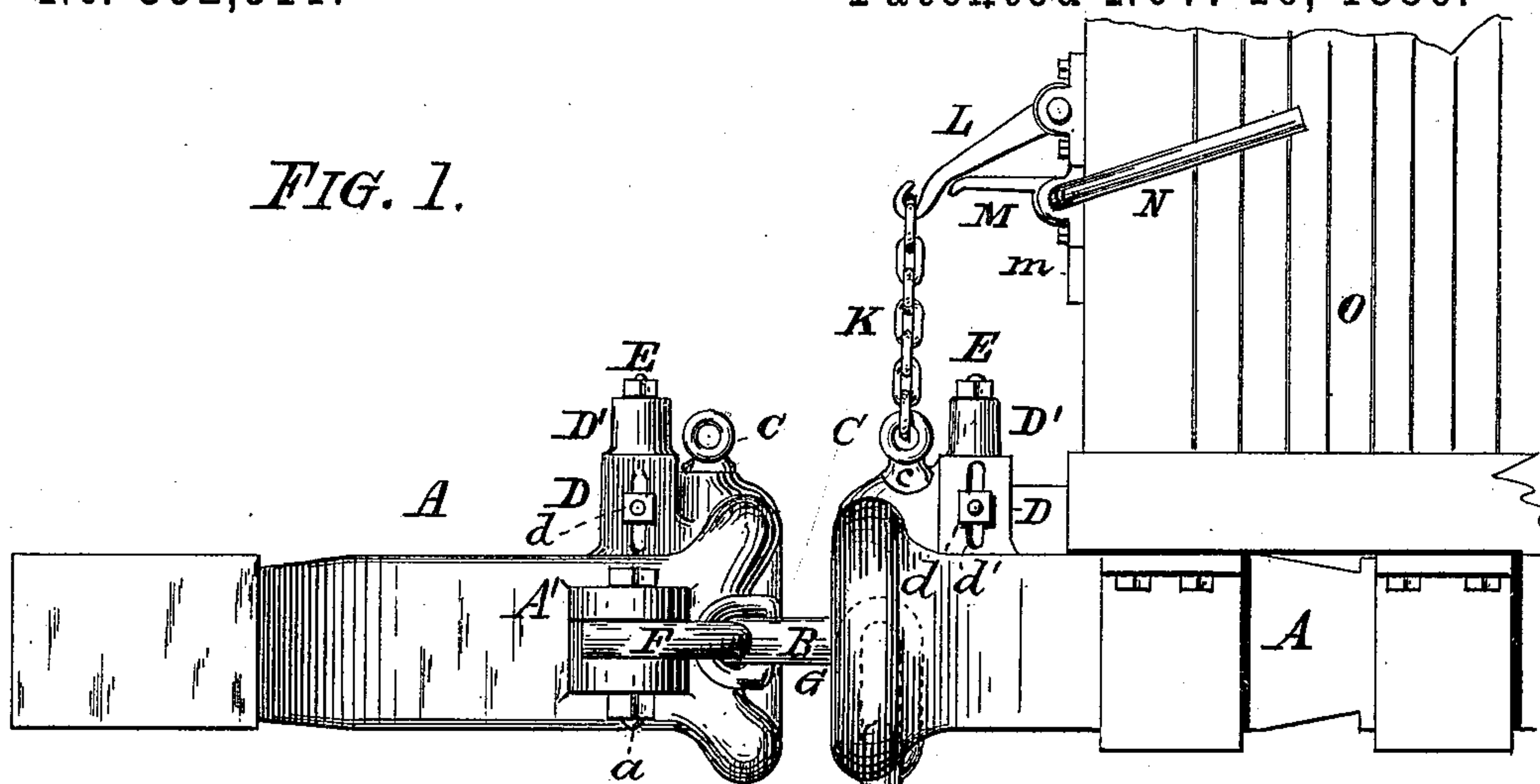
(No Model.)

B. BIRD.  
CAR COUPLING.

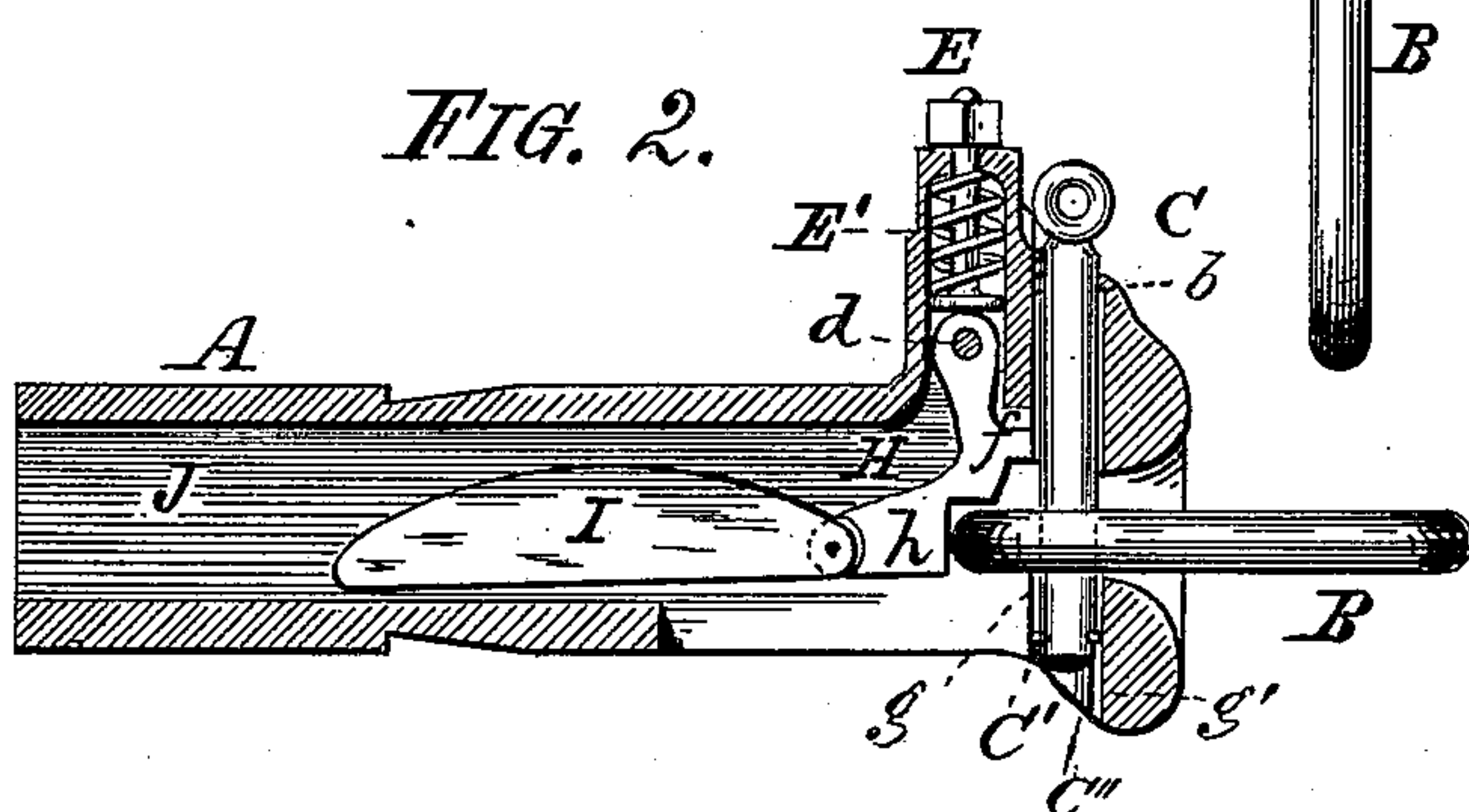
No. 352,511.

Patented Nov. 16, 1886.

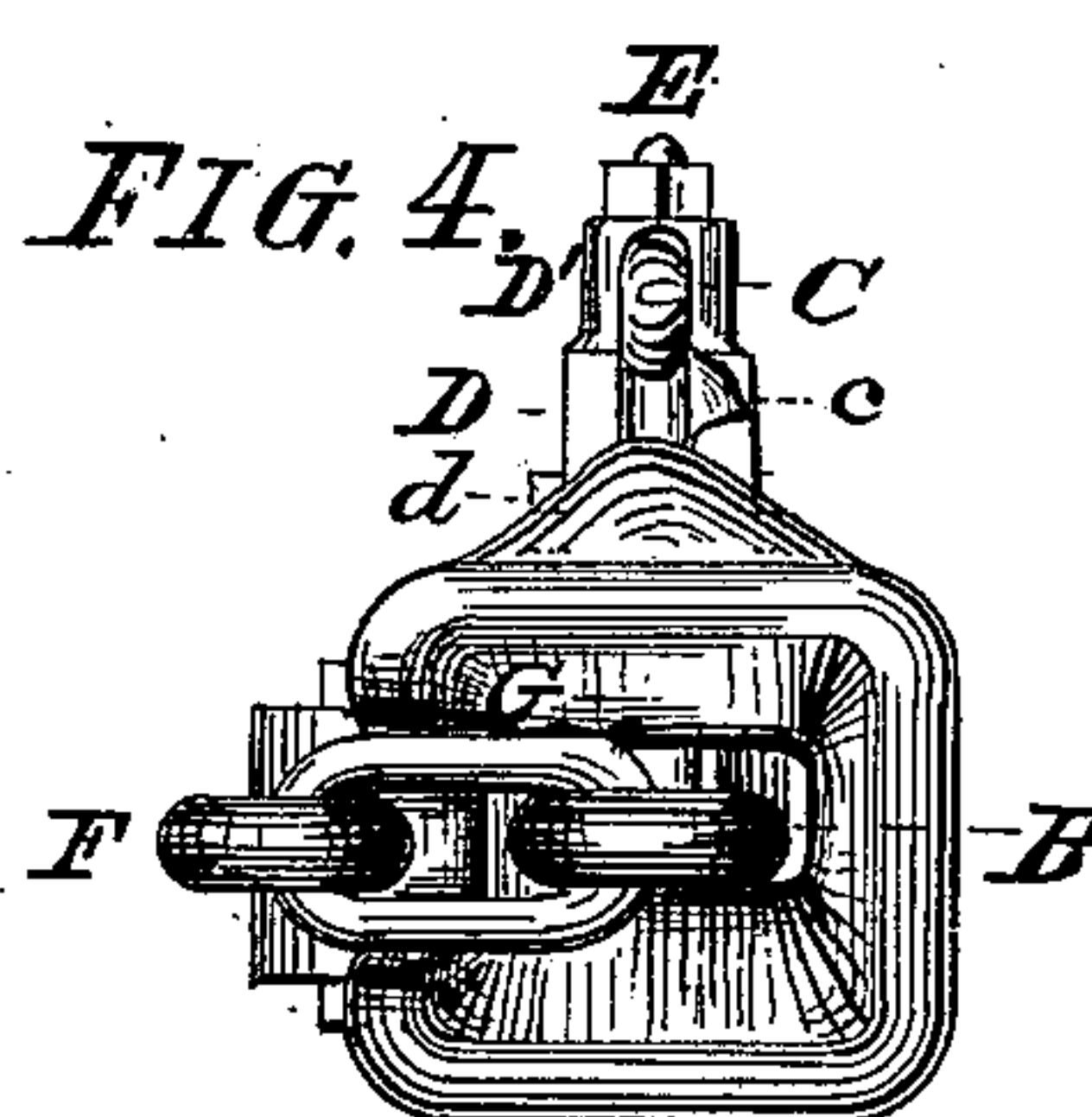
*FIG. 1.*



*FIG. 2.*



*FIG. 4.*



*FIG. 3.*

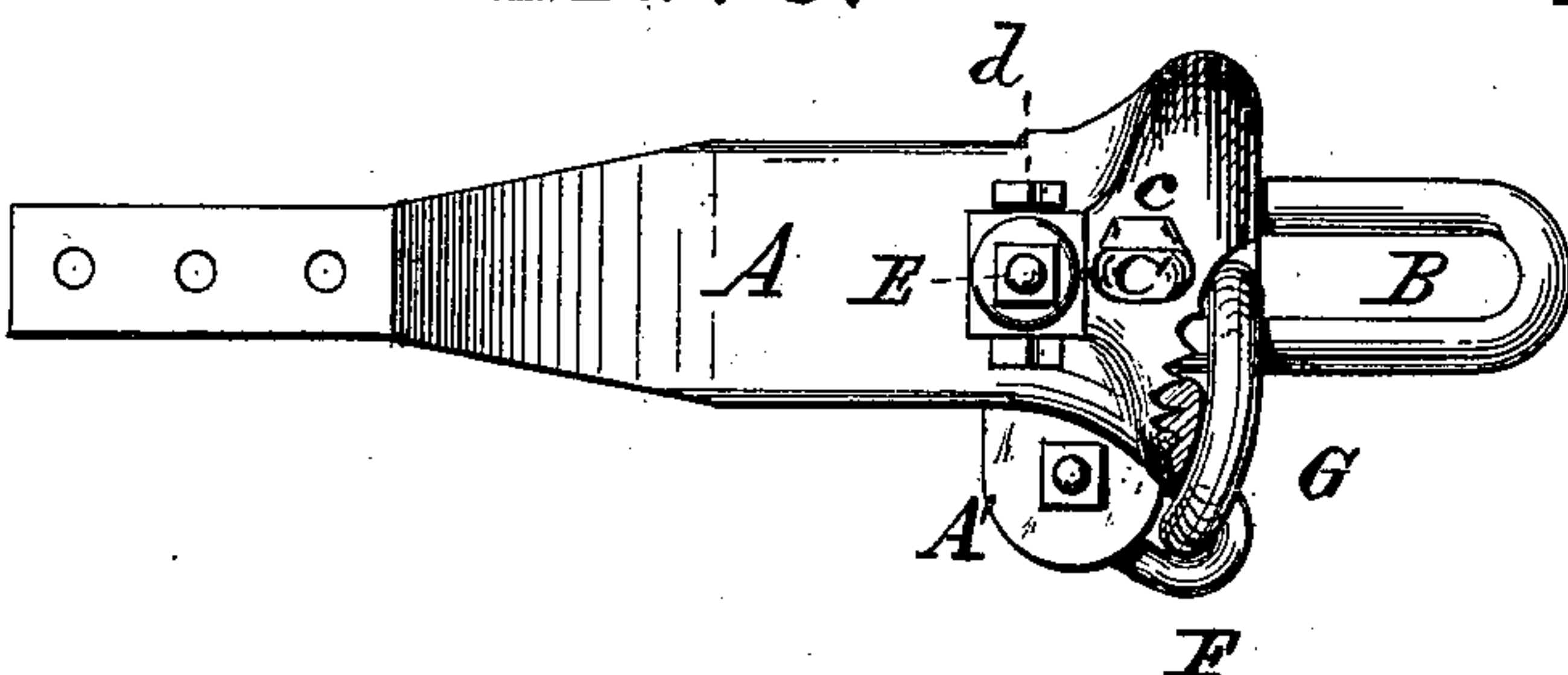
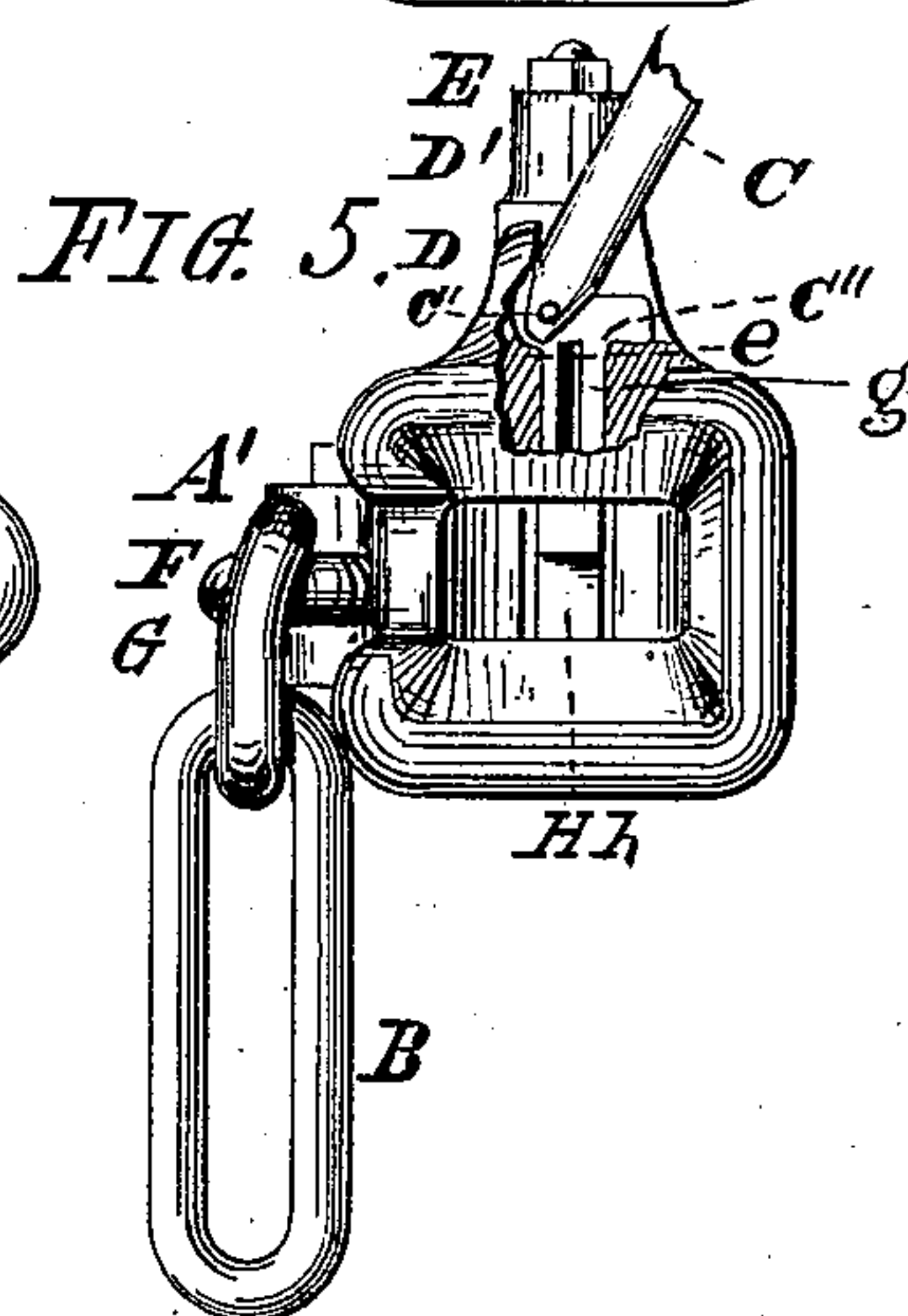


FIG. 5.



**Witnesses :**

Willie O. Stark.  
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# UNITED STATES PATENT OFFICE.

BERNARD BIRD, OF BUFFALO, NEW YORK.

## CAR-COUPLING.

SPECIFICATION forming part of Letters Patent No. 352,511, dated November 16, 1886.

Application filed February 10, 1886. Serial No. 191,389. (No model.)

*To all whom it may concern:*

Be it known that I, BERNARD BIRD, of Buffalo, in the county of Erie and State of New York, have invented certain new and useful  
5 Improvements in Car - Couplings; and I do hereby declare that the following description of my said invention, taken in connection with the accompanying sheet of drawings, forms a full, clear, and exact specification, which will  
10 enable others skilled in the art to which it appertains to make and use the same.

My present invention has general reference to improvements in car-couplings; and it consists, essentially, in the novel and peculiar  
15 combination of parts and details of construction, as hereinafter first fully set forth and described, and then pointed out in the claim.

In the drawings already mentioned, which serve to illustrate my said invention more  
20 fully, Figure 1 is a side elevation of a pair of draw-heads coupled together, the one at the right hand being shown affixed to a fragment of a car and supplied with an uncoupling device. Fig. 2 is a longitudinal sectional  
25 elevation, and Fig. 3 a plan of a draw-head complete. Figs. 4 and 5 are end elevations of the draw-heads.

Like parts are designated by corresponding letters of reference in all the figures.

30 This invention embodies improvements upon the device for which Letters Patent of the United States were granted to me September 23, 1884, No. 305,418, the object being to provide for means for carrying a link and pin  
35 with each draw-head, so as to prevent the possibility of two draw-heads meeting without a coupling link or pin to make connection, and also in a novel device for upholding the link within the draw-head during the time that con-  
40 nection is being made.

The principal features of my car-coupling are the same as those of the device described and claimed in the Letters Patent heretofore recited, viz:

45 A is the draw-head, having on one side and near its forward end two lugs, A', within which is pivoted, by the bolt a, Fig. 1, a link, F, to which is secured a second link, G, the latter being an intermediary between said link F and  
50 the coupling-link proper, B, as clearly shown in

the drawings, whereby the last-mentioned link is permanently secured to the draw-head, and always ready to be used in coupling whenever occasion requires.

C is the coupling-pin. It is vertically movable within the pin-aperture C'', Fig. 2, of the draw-head, but prevented from being removed therefrom by a pin, C', striking against a shoulder, b, in said aperture, there being two  
55 grooves, g g', in the aperture C'' for the passage of said pin C'. In the upper part of the pin-aperture C'' is an offset, e, Fig. 5, upon  
60 which the pin C, when pulled up as far as possible, may rest, to prevent coupling, which is very desirable in many cases.

Behind the coupling-pin there is in the draw-head a rise, D, terminating in a cylindrical projection, D', there being located within said projection D' a bolt, E, having its head  
65 acted upon by a spiral spring, E', for the purpose hereinafter to be referred to. In the sides of the projection D are oppositely-located slots d', through which passes a bolt, d, carrying the dog H, which dog sustains the pin C prior to  
70 coupling, and upholds the link, substantially as described in the patent already mentioned, except that the head of the bolt E, pressing upon the dog H by the spiral spring E, sustains said link B in a substantially-horizontal  
75 position, the action being assisted by a tail-piece or counterpoise, I, Fig. 2, operating in the passage J, running longitudinally through the said draw-head, said counterpoise being pivoted to the dog at h.

To the face of the car-body O is secured a  
80 hand-rod, N, having centrally a bell-crank, M m, said rod being journaled in properly-arranged bearings, readily understood. Above this hand-rod, in the middle of the car above the draw-head, is pivoted a lever, L, to which the  
85 coupling-pin C is attached by means of a chain, K. Depressing the hand-rod N causes the bell-crank M to lift the lever L, and this in turn to pull the pin upward, thus uncoupling a pair of draw-heads in the easiest possible  
90 manner.

The operation of the cars in coupling does not differ materially from that described in my Patent No. 305,418, and a description thereof  
95 is therefore deemed superfluous.

Having thus fully described my invention,  
I claim as new and desire to secure to me by  
Letters Patent of the United States—

5 The combination, with the draw-head and  
coupling-link, of the pivoted dog H, bolt E,  
with spiral spring E', and the counterpoise I,  
pivoted to said dog and arranged to operate  
within the passage J, as and for the purpose  
set forth.

In testimony that I claim the foregoing as 10  
my invention I have hereto set my hand in  
the presence of two subscribing witnesses.

BERNARD BIRD.

Witnesses:

MICHAEL J. STARK,  
JESSIE A. TULLEY.