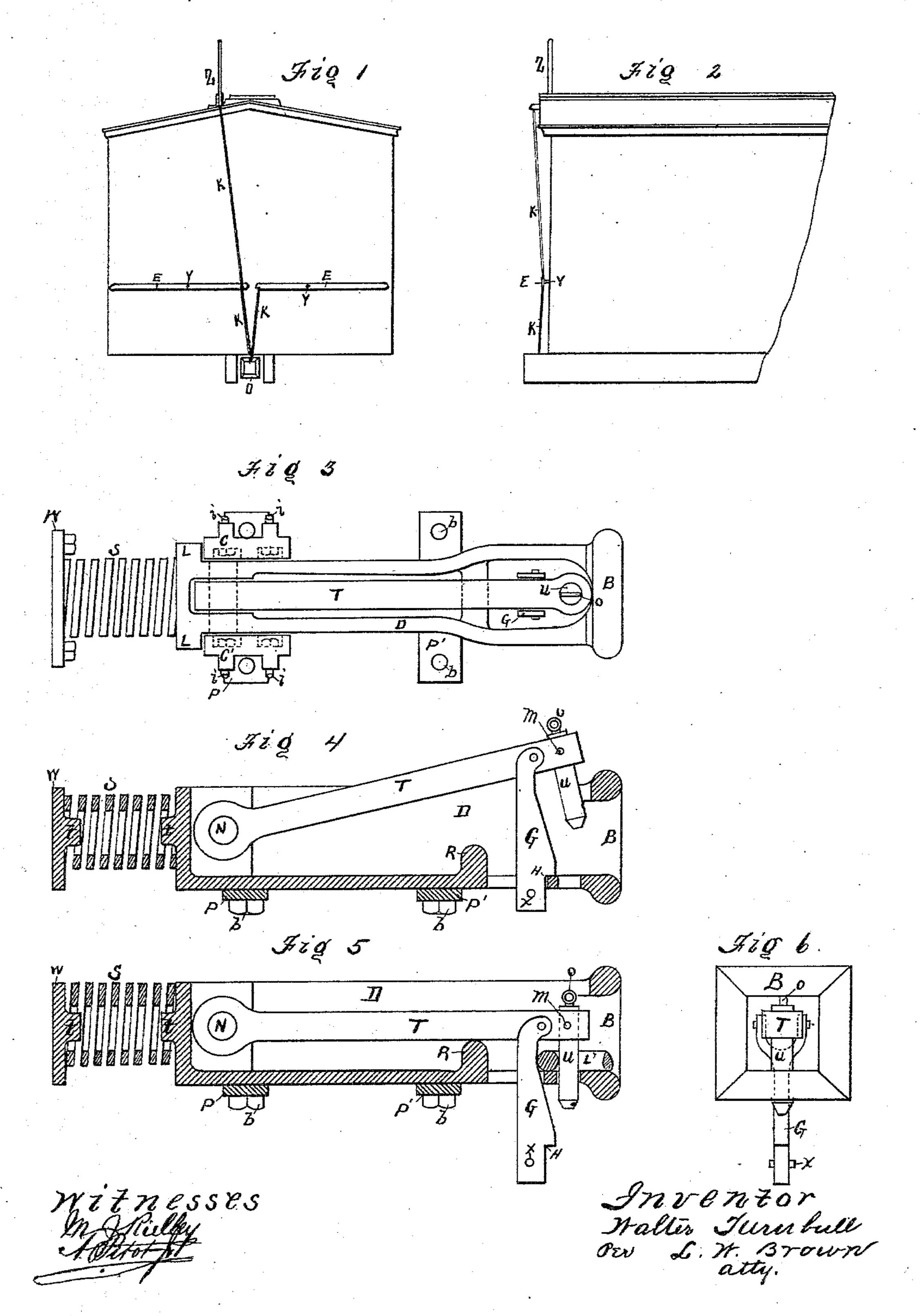
W. TURNBULL.

CAR COUPLING.

No. 303,241.

Patented Aug. 5, 1884.



United States Patent Office.

WALTER TURNBULL, OF NEW ORLEANS, LOUISIANA.

CAR-COUPLING.

SPECIFICATION forming part of Letters Patent No. 303,241, dated August 5, 1884.

Application filed April 26, 1884. (No model.)

To all whom it may concern:

Be it known that I, WALTER TURNBULL, a citizen of the United States, residing at New Orleans, parish of Orleans, and State of 5 Louisiana, have invented a new and useful Improvement in Car-Couplings, of which the fol-

lowing is a specification.

My invention relates to Carc Couplings which are operated automatically; and the objects of 10 my invention are, first, to provide a means by which railway-cars can be coupled together automatically, and without endangering the limbs and lives of railway employés; second, to afford facilities by which the cars can be 15 uncoupled either from the top of car or from the ground, ad libitum, and this end is accomplished without necessitating employés to stand on track between the cars, thus endangering their lives; third, to afford facilities 20 by which my improved automatic coupler can be adapted to any car, and be operated in conjunction with cars having other types of coupling. I attain these objects by the mechanism illustrated in the accompanying draw-25 ings, in which—

Figure 1 is an end view of freight-car showing the application of my coupling. Fig. 2 is a side elevation of Fig. 1. Fig. 3 is a plan view of the coupler. Fig. 4 is a horizontal 30 section showing the coupling-pin in position to receive the link to be coupled. Fig. 5 is a horizontal section of the coupler, showing position of coupling-pin after the coupling has been made. Fig. 6 is an end view of coup-

35 ling.

Similar letters refer to similar parts through-

out the several views.

The buffer or draw-head D, with bell-mouth B, is supported between the draft-timbers of 40 cars by the straps or plates P P', suspended from body of ear by the bolts b b. At the rear end of draw-head D are placed or cast lugs L L', which keep draw-head from pulling out by striking against the draft-plates 45 CC. These draft-plates are secured by the from either side or from the top. bolts i i to the draft-timbers of car. The draw-head D is maintained in position and kept from being forced back under the car by the spring S, which is placed at rear of | broadly; but

draw-head D, and between it and the washer 50 W, secured to a heavy timber placed between the draft-timbers of car, this spring S being maintained in position by the tongues t t', the object of the spring S, draft-plates C and C', and washer W being to provide a means 55 by which the draw-head D will have elasticity, rendering the draw-head less liable to be injured and broken than if it were rigid.

The tongue or draw-bar T is secured to the draw-head D by the pin N. The coupling- 60 pin u is secured to the forward end of drawbar T by the pin m. To this pin m is secured a dog or automatic latch, G, provided with the shoulder H. This dog G straddles the draw-bar T, and passes through opening in 65 bottom of draw-head D. When the couplingpin and draw-bar T are raised, the dog G rises also, and the shoulder H of the dog rests on the bottom of draw-head, and maintains the coupling-pin in position to receive 70 the coupling-link. When the coupling-link enters the draw-head D, it strikes against the dog G, knocking the shoulder H off from its bearing on bottom of draw-head, which allows the coupling-pin and draw-bar to drop 75 and engage with the coupling-link. The link is kept from coming into the draw-head D too far by the back of dog G striking against the rib R, placed in bottom of draw-head D. This rib R also forms a rest for the draw-bar 8c T to rest on when the coupling is made. The latch or dog G is kept from being pulled out

The draw-bar T and coupling-pin u are 85 raised by means of a chain or rope, K, attached to the eyebolt o, placed in top end of the coupling-pin u. There are three chains or ropes, K, attached to eyebolt o, one leading to each of the two levers E E, placed on 90 end of car, and working on fulcrums Y, and one chain leading to bell-crank Z, placed on top of car, so that the car can be uncoupled

of slot in bottom of draw-head D by the pin

x, placed in bottom end of latch G.

I am aware that prior to my invention car- 95 couplings have been made to work automatically. I therefore do not claim the subject,

The combination, in an automatic car-coupler, of the draw-head D, provided with rib 5 R, tongue t, and lugs L, with the draw-bar T, having the coupling-pin u secured to forward end, and the dog or automatic latch

What I do claim as my invention, and desire |G|, provided with shoulder H and pin x, all to secure by Letters Patent, is—

substantially as set forth, for the purpose specisubstantially as set forth, for the purpose specified.

WALTER TURNBULL.

Witnesses:

T. WHARTON COLLENS,

H. E. UPTON.