## J. T. WOODS.

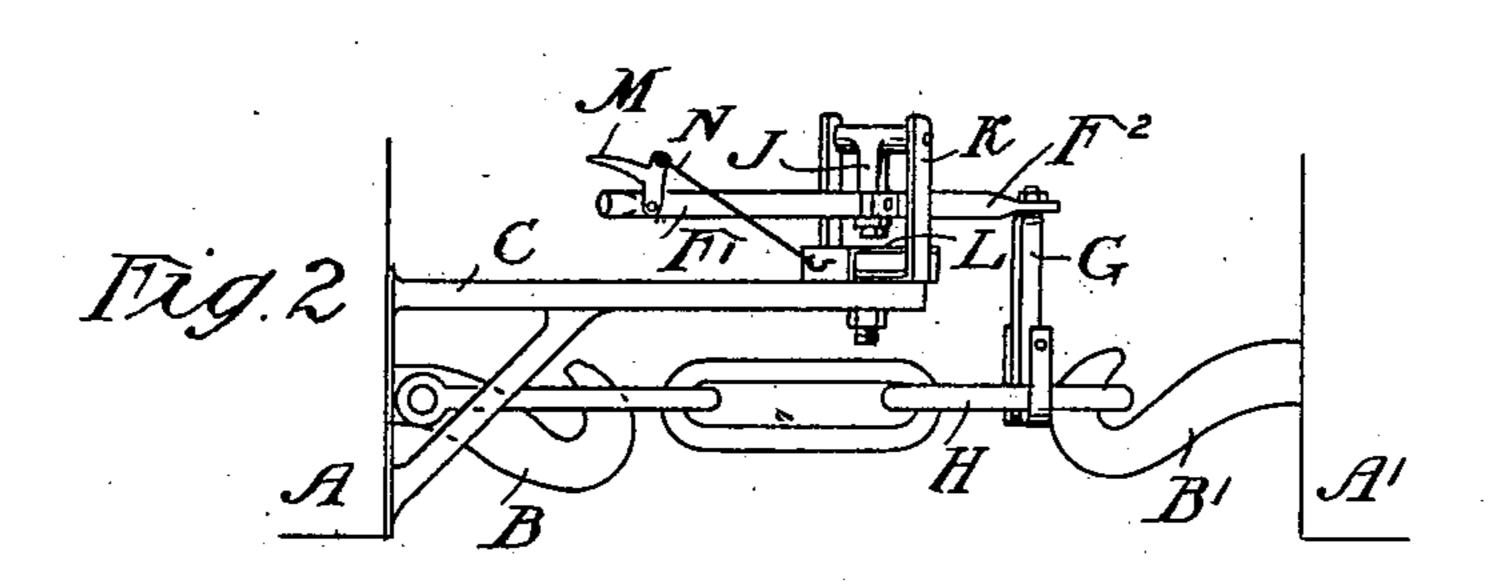
## APPLIANCE FOR USE IN COUPLING RAILWAY TRUCKS.

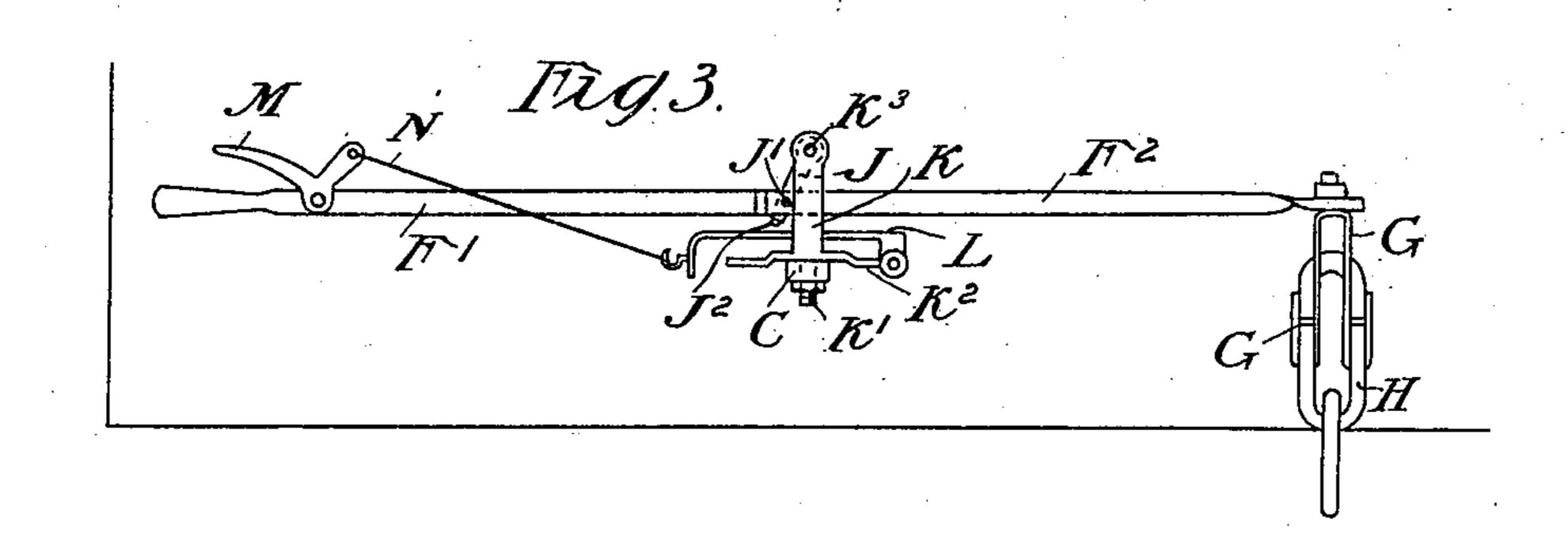
NO MODEL.

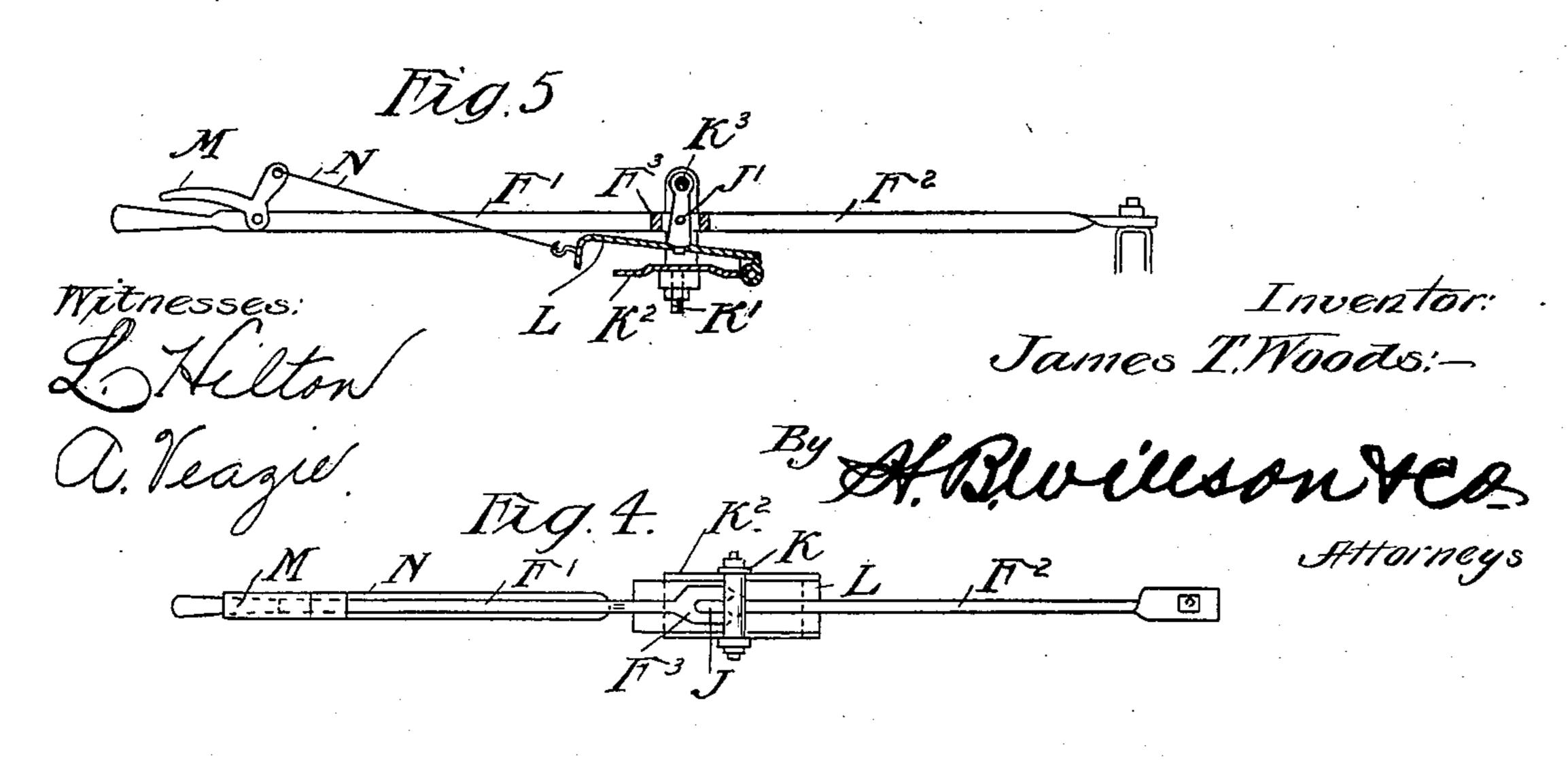
APPLICATION ELLED DEC. 8, 1902.

Rig.1.

C Fig. K







## United States Patent Office.

JAMES THOMAS WOODS, OF MELBOURNE, VICTORIA, AUSTRALIA.

APPLIANCE FOR USE IN COUPLING RAILWAY-TRUCKS.

SPECIFICATION forming part of Letters Patent No. 730,728, dated June 9, 1903.

Application filed December 8, 1902. Serial No. 134,399. (No model.)

To all whom it may concern:

Be it known that I, James Thomas Woods, a subject of the King of Great Britain, residing at No. 454 Collins street, Melbourne, in the State of Victoria, Australia, have invented certain new and useful Improvements in Appliances to be Used in Coupling Railway-Trucks, of which the following is a specification.

means of which railway-trucks can be coupled or uncoupled by an operator from the side of the train, so obviating the present necessity of entering between the trucks to place the coupling-chain on or removing it from the hooks.

The invention is most applicable for use in connection with goods-trucks where the coupling-links are at center of truck.

I will now describe the invention with reference to the accompanying drawings, in which—

Figure 1 shows an end view of the appliance with the coupling-chain held, but uncoupled.

Fig. 2 shows a similar view with parts in altered position and the chain coupled. Fig. 3 shows side view of the appliance, looking on to end of a truck. Fig. 4 shows plan of the appliance; and Fig. 5, a side view, partly in section, showing parts locked.

To the end of each truck I attach a bracket C and which projects for about two feet from the truck. To the bracket-arm C near its end is pivoted a frame K, that consists of two uprights and a flat plate  $K^2$ . The plate  $K^2$  rests upon the arm C and the frame is held in position by screw-pin K', attached to the frame

A A' represent trucks; B B', coupling-hooks.

and which passes through a hole in the arm to C and is held in place by screw-nut. A pin K<sup>3</sup> connects the two uprights of the frame, and upon said pin is hung a tongue J. I employ a long lever F' F<sup>2</sup>, that passes between the uprights of the frame, the said lever being slotted about its center at F<sup>3</sup> to receive the

45 slotted about its center at F<sup>3</sup> to receive the tongue Jaforesaid, and the lever is connected to the tongue by a through-pin J' and upon which it is free to swing. One arm of the lever forms an operating-handle F' and to

50 the end of the other arm F<sup>2</sup> is secured a bent plate or frame G, that is adapted to hold the end link of the coupling-chain H. The de-

vice G is in the form of a double hook, with pins G' to hold chain in place.

The appliance is so set that the porter or 55 man in charge can couple or uncouple chain by operating the lever-handle F' from the side of the truck. The arrangement will permit of a combined three-way movement, whereby the lever-arm F<sup>2</sup> may be elevated or lowered 60 and swung around and moved back and forward, so as to couple or uncouple the link H to the coupling-hook B' of the truck A'. The movements are as follows: a back-and-forward swing of the lever from the pin K<sup>3</sup>, a 65 vertical oscillating movement on the pin J', and a horizontal oscillating movement on the pin K'.

This appliance may be provided also with means for locking the lever during the oper- 70 ation of coupling. This consists in providing a projection J<sup>2</sup> at end of the tongue J and a plate L, that is hinged to the frame-plate K2, the plate L being provided with a hole to receive the projection J<sup>2</sup>. The plate L is con- 75 nected to crank-lever M by wire N, and the locking of the lever is accomplished by operating the said crank-lever, which will raise the free end of the plate L with the projection J<sup>2</sup> of the tongue J in the hole in plate L, 80 (see Fig. 5,) and while the lever is thus kept from swinging back or forward (with the pin K<sup>3</sup> as the center) the chain may be coupled by the compound lever movement described.

I may employ any simple means for locking 85 the lever to a truck; but such locking device should allow of the free back-and-forward swing of the lever, (from the pin  $K^3$ ,) such movement being given to allow of free play of the coupling appliance when train is pass- 90 ing a curve.

One of the said lever constructions above described will be employed in conjunction with each coupling-chain.

Having now particularly described and as- 95 certained the nature of my said invention and in what manner the same is to be performed, I declare that what I claim is—

1. Appliance to be used in coupling rail-way-trucks in combination lever F' F<sup>2</sup>, arm 100 C projected from truck, frame K pivoted to arm, tongue J hinged to the frame and connected to said lever, means at one end of the lever for holding a link of the coupling-chain

substantially as and for the purposes described.

2. Appliance to be used in coupling railway-trucks, in combination lever F' F<sup>2</sup>, arm 5 C projected from truck, frame K pivoted to arm, tongue J hinged to the frame and connected to said lever, means at one end of lever for holding a link of the coupling-chain, means for preventing back-and-forward swing of the lever comprising plate L hinged to frame K, a hole in the plate L and a projection at

base of tongue J, crank-lever at handle end of long lever connected by wire to plate L, substantially as and for the purposes described.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

JAMES THOMAS WOODS.

Witnesses:

A. O. SACHSE, A. HARKER. 15