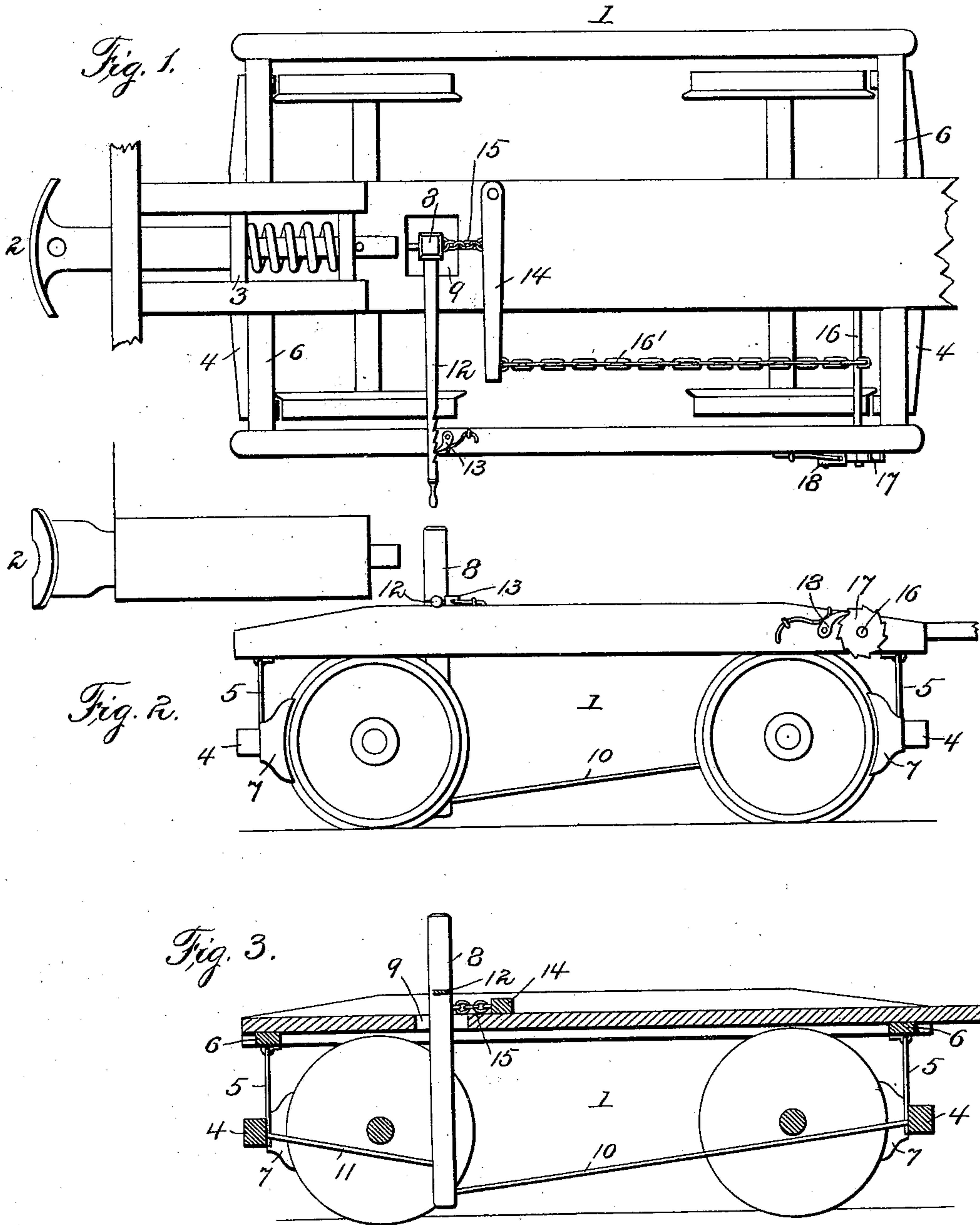


(No Model.)

W. M. FORBUSH.  
CAR BRAKE.

No. 561,102.

Patented June 2, 1896.



Witnesses  
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# UNITED STATES PATENT OFFICE.

WILLIE M. FORBUSH, OF CRYSTAL, NEW HAMPSHIRE.

## CAR-BRAKE.

SPECIFICATION forming part of Letters Patent No. 561,102, dated June 2, 1896.

Application filed October 18, 1895. Serial No. 566,115. (No model.)

*To all whom it may concern:*

Be it known that I, WILLIE M. FORBUSH, a citizen of the United States, residing at Crystal, in the county of Coos and State of New Hampshire, have invented certain new and useful Improvements in Car-Brakes; 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.

My invention relates to car-brakes, and more particularly to brakes used on freight-cars—such, for instance, as stone or logging cars.

The object of the invention is to provide a brake which may be set by the concussion of the cars caused by applying the brakes on the engine and may be also set by hand when on a side track and detached from the engine.

With this object in view the invention consists of certain features of construction and combination of parts, which will be hereinafter fully described and claimed.

In the accompanying drawings, Figure 1 is a plan view of a car-truck. Fig. 2 is a side view of the same, and Fig. 3 is a longitudinal vertical sectional view.

In the drawings, 1 denotes the car-truck, which may be of any desired construction.

2 denotes the draw-head of the coupler, which is secured to the truck in the usual manner and is provided with spring follower-plates 3, through the inner one of which projects the extreme end of the draw-bar.

4 denotes the brake-beams, which are secured by hangers 5 to cross-pieces 6 of the car-truck, and 7 denotes the brake-shoes on the end thereof.

The parts I have above described may be of any well-known or approved construction and, as shown in the accompanying drawings, are those of the ordinary form. As these parts in themselves form no part of my invention and are well known in the art a further description thereof is not deemed necessary.

8 denotes a lever, the upper end of which projects through an opening 9 in the car-truck, and the lower end of which is connected by a link or rod 10 to the rear brake-beam, while the forward brake-beam is connected by a link or rod 11 to the lever at a point slightly above the other lever. The upper end of the lever projects in the path of movement of the draw-head, and it will be seen that when the brake is applied on the engine the cars will

bump together, which action will force the draw-heads inward, and in doing this the draw-bars of each head will strike the upper end of the lever and in that manner automatically apply the brakes to each truck. When it is not desired to brake the cars in this manner, but to allow them to be controlled by the brakeman, the lever is drawn to one side of the path of movement of the draw-bar by a handle-rod 12, provided with teeth which engage a spring-pawl 13, which will hold the lever in or out of the path of engagement of the draw-bar.

To brake the wheels from the truck, I provide the following means: 14 denotes a lever pivoted to the car-truck and connected by a chain 15 to the upper end of the lever 8. The free end of the lever 14 is connected to a winding-shaft 16 by a chain 16'. The winding-shaft has a ratchet-wheel 17 fixed to its free end, which is engaged by a spring-pawl 18. A crank or other means may be employed for turning the winding-shaft, which, when wound, will draw upon the free end of the lever 14, and owing to the connection of the said lever with the lever 8 the brakes will be applied. This construction admits of the brakes being applied when the cars are left at a siding.

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

The combination with a car-truck and a spring-actuated draw-head, of brake-beams, a lever, the upper end of which is located in the path of movement of the draw-head, a link connecting the rear brake-beam to the lower end of the lever, a link connecting the forward brake-beam to the lower end of the lever at a point above the connection of the rear brake-beam, a handle-bar for throwing the upper end of the lever in or out of the path of movement of the draw-head, a lever pivoted to said truck, a chain connecting the lever with the first-named lever, a winding-shaft having a ratchet-wheel, a spring-pawl engaged with said ratchet-wheel, and a chain connecting the free end of the lever to the winding-shaft, substantially as set forth.

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

WILLIE M. FORBUSH.

Witnesses:

ASHLEY W. JACKSON,  
LEWIS LOVEJOY.